

# Author Index

## A

Aaltonen P. 1274  
 Ablamunits V. 848  
 Adler A. 298  
 Ahloulay M. 637  
 Ahmed K.A. 700  
 Ahn J.D. 713  
 Ahola H. 1274  
 Ahrén B. 1998  
 Airaksinen K.E.J. 259  
 Akanuma Y. 992  
 Åkerblom H.K. 1051  
 Albareda M. 783  
 Alberti K.G.M.M. 245  
 Aldington S.J. 156  
 Alessi M.C. 2025  
 Alford F.P. 824  
 Allcock R. 514  
 Allen T.J. 874, 878  
 Almgren P. 1148  
 Ambye L. 1330  
 Andersen G. 1170, 2220  
 Anderson S. 333  
 Angel B. 1200  
 Ånggård E.E. 605, 706  
 Aoki M. 1034  
 Apelqvist J. 2077  
 Arca M. 367  
 Arian G. 209  
 Arner P. 654, 1268  
 Arngrimsson R. 2098  
 Arvidsson L. 839  
 Arvilommi P. 290  
 Asai T. 433  
 Ashcroft F.M. 747, 1019  
 Ashcroft S.J.H. 787  
 Asola M. 2171  
 Assaloni R. 834  
 Assert R. 188  
 Aulich H. 416  
 Auwerx J. 544  
 Azuma J. 1354  
 Azzoni E. 151

## B

Babazono T. 127  
 Badet L. 859  
 Bagust A. 2140  
 Baird J. 33  
 Balendran A. 173  
 Balent B. 305  
 Bankir L. 637  
 Barberà A. 507  
 Barbetti F. 898  
 Barbieri M. 1232  
 Bardelli C. 972  
 Barden A. 129  
 Bardoux P. 637  
 Baroni M.G. 367  
 Bartorelli A. 839

Bashan N. 2156  
 Basmaciogullari A. 2066  
 Bassaris H.P. 1011  
 Bastelica D. 2025  
 Basu A. 729  
 Basu R. 729  
 Basu S. 766  
 Batty I.H. 173  
 Bayle F. 859  
 Baynes J.W. 1310  
 Beck-Nielsen H. 537, 824  
 Beilin L. 129  
 Bendayan M. 575  
 Bendtzen K. 309  
 Benhamou P.Y. 859, 2239  
 Benmezroua Y. 786  
 Benvenuti E. 1232  
 Berg T.J. 488  
 Berg U.B. 865  
 Berger M. 147  
 Berglund L. 312, 1170  
 Bergman M.-L. 1054  
 Bernal-Mizrachi E. 453  
 Bernstein A. 363  
 Berrino L. 464  
 Bertelli E. 575  
 Bertelsen M. 605  
 Berti I. 151  
 Bertram J.F. 878  
 Bertuglia S. 2165  
 Beyer U. 416  
 Biason-Laubert A. 286  
 Bieglmayer C. 164  
 Biessels G.J. 346  
 Biggeri A. 22  
 Bilous R.W. 721  
 Bingley P.J. 16  
 Bischof M.G. 48  
 Björntorp P. 1335  
 Blaak E.E. 2013  
 Blair A.S. 173  
 Blanco-Molina A. 2038  
 Blaszczyk J. 585  
 Bo S. 972  
 Bode C. 1121  
 Boer-Lima P.A. 2088  
 Bogardus C. 779  
 Bone A.J. 320  
 Boner G. 874  
 Bonifacio E. 267  
 Bonini P. 1281  
 Bonnet F. 874  
 Bonora E. 2107  
 Boomsma F. 388  
 Borboni P. 1125, 1281  
 Borch-Johnsen K. 1065, 1170, 2220  
 Bornfeldt K.E. 1067  
 Borrebaek J. 488  
 Bosi E. 267  
 Bouchard C. 1335, 2231  
 Bouillon R. 567  
 Boulton A.J.M. 1296, 2032

Bourassa P. 585  
 Boutin P. 775  
 Bouzakri K. 544  
 Braun K.P.J. 346  
 Brennecke S.P. 927, 1133  
 Bridgett M. 848  
 Bruining G.J. 388  
 Brulhart Meynet M.-Cl. 1177  
 Brunner G.A. 305  
 Bruno G. 22  
 Brunson M.A. 26  
 Bumbure A. 188  
 Buratti E. 151  
 Burgess J. 2032  
 Buzzetti R. 367  
 Byberg L. 2134

## C

Cade J.E. 333  
 Cai T. 81  
 Caias A. 693  
 Calvert G.D. 312  
 Calvillán M. 1200  
 Cameron N.E. 621, 1161, 1973  
 Camilleri M. 729  
 Cao Z. 874  
 Capici F. 367  
 Capito K. 738  
 Cappuccio F.P. 245  
 Carlsson M. 629  
 Carpentier A. 1989  
 Carrier M.J. 605, 706  
 Carstensen B. 1170  
 Carter L. 444  
 Casal I. 2066  
 Casamitjana R. 1064  
 Castaing M. 2066  
 Castillo E. 104, 1062  
 Cattin L. 151  
 Caumo A. 898  
 Cavallo M.G. 268  
 Cederberg J. 766  
 Ceriello A. 834  
 Cerutti F. 22, 898  
 Cervar M. 209  
 Cha B.S. 444  
 Chagnon M. 1335  
 Chambrier C. 544  
 Charlton R. 784  
 Chatenoud L. 521  
 Chaturvedi N. 2203  
 Chen J.L. 501  
 Chen M.-C. 325  
 Cheng X.W. 433  
 Cheong K. 514  
 Cherubini V. 898  
 Chiaramonte F. 1326  
 Chikama T.-I. 340  
 Choi B.C.K. 1221  
 Christiansen F. 514  
 Ciaraldi T.P. 444

Cicconi S. 1281  
 Clark A. 2227  
 Clarke P. 298  
 Clémenceau B. 2044  
 Cockburn B.N. 1326  
 Colin C. 859  
 Comper W.D. 230  
 Conget I. 309, 839  
 Cook D.G. 245  
 Cooper M.E. 108, 874, 878, 1957  
 Coppolino G. 268  
 Corder R. 424  
 Corsi A. 1232  
 Cotter M.A. 621, 1161, 1973  
 Coyaji K.J. 1197  
 Cozzolino F. 1281  
 Cricchiutti G. 151  
 Cruickshank J.K. 333  
 Crystal A. 363  
 Csermely P. 220  
 Cuesta-Munoz A. 898  
 Cull C.A. 298, 2227  
 Currie C.J. 2140  
 Cusi K. 2210  
 Czernichow P. 2066

## D

Daa Schroeder H. 824  
 Dabrowski M. 747  
 Dahlmans V.E.H. 437  
 Dalgaard L.T. 946, 1065  
 Dallinger S. 95  
 Dalton R.N. 224  
 D'Amico M. 464  
 Das A.K. 1094  
 Davies G.F. 2004  
 Day A. 784  
 De Angelis L. 464, 1155  
 de Graaf R.A. 346  
 De Hertogh R. 1318  
 De Leeuw I.H. 40  
 de Leiva A. 693  
 De Lucia D. 1155  
 De Salvia A. 22  
 De Vos P. 646  
 Decochez K. 40  
 DeFronzo R.A. 2210  
 Desoye G. 209, 389  
 Desrosiers J. 585  
 Di Filippo C. 464  
 Di Marco R. 309  
 Di Mario U. 367, 674  
 Dimitracopoulos G. 1011  
 Docherty K. 1203  
 Dogra G. 593  
 Domingo M. 507  
 Donelan S.S. 910  
 Donnelly R. 659  
 Donohoe M. 2032  
 Dorchy H. 40

## Downes

Downes C.P. 173  
Drasdo N. 700  
Drivsholm T. 1065, 1170, 2220  
Du Caju M.V.L. 40  
Duffy T. 848  
Dullaart R.P.F. 429  
Dunger D.B. 224  
Durand E. 786  
Dusserre E. 544

## E

Eaton S.E.M. 1973  
Ebeling P. 519  
Ebenbichler C.F. 1111  
Echwald S.M. 1330  
Edlund H. 1071  
Edmonds M.E. 2032  
Efimov A. 1302  
Eftekharpour E. 2004  
Ehwal R. 416  
Eisenbarth G.S. 354, 928  
Eizirik D.L. 325, 567, 2115  
Ek J. 1170, 2220  
Ekberg K. 388, 1184  
Ekström C.T. 123, 237  
Ellard S. 924  
Ellmerer M. 305  
Elsner M. 1189  
Endl J. 70  
Eriksson P. 654, 1268  
Eriksson U.J. 766  
Erkkilä S. 818  
Erkkola M. 63  
EURODIAB Prospective  
Complications Study  
Group 2203

## F

Failla M. 203  
Fall C. 1197  
Falorni A. 515  
Fathallah L. 1102  
Fedele S. 2165  
Federici M. 1281  
Fernandez-Real J.-M. 518  
Ferrelli F. 1281  
Ferrer J. 1330  
Ferrucci L. 1232  
Fiaux M. 104, 1062  
Fiedler M. 2180  
Fina F. 2025  
Fisher R.M. 1268  
Fjeldstad K. 488  
Flyvbjerg A. 495, 721  
Föger B. 1111  
Fontcuberta J. 693  
Forbes J.M. 108  
Foster A.V.M. 2032  
Francke S. 115  
Franco C. 1064  
Frank R.N. 1102  
Frank S. 471

Fraser W. 333  
Fritsche A. 1125  
Froguet P. 115, 517, 775, 786  
Frölich M. 437  
Fukuda T. 1354  
Fukuen S. 1354  
Fuller J.H. 2203  
Fumelli P. 979  
Fürsinn C. 48  
Furuta H. 2092

## G

Gæde P.H. 2220  
Gaillard R.C. 104, 1062  
Gale E.A.M. 3, 16, 1349  
Gamba P.L. 203  
Gambelunghie G. 515  
Gao G. 757  
Garcia J. 1140  
Garcia M. 646  
Garduño E. 1238  
Garry J.P. 26  
Geel-Georgelin O. 2025  
Gerhardinger C. 791  
Giacca A. 1989  
Giali S. 1011  
Giani G. 147, 1068  
Giannattasio C. 203  
Gibson J.M. 333  
Gilbert R.E. 878  
Gill G.V. 1202  
Gillespie K.M. 3  
Gispén W.H. 346  
Giugliano D. 464, 1155  
Giugliano F. 1155  
Giusti A. 2165  
Glaser B. 910  
Glass L. 2210  
Glatz J.F.C. 2013  
Gloyn A.L. 787  
Gogos C.A. 1011  
Golding E.M. 363  
Gómez P. 2038  
Gomis R. 309, 507, 839, 1064  
Gomis R.R. 507  
Gopaul N.K. 706  
Gorini A. 1326  
Gorus F.K. 40  
Grabert M. 1068  
Gragoli C. 1326  
Grappiolo A. 203  
Grarup N. 1330  
Gray A. 298  
Gray S. 659  
Greenberg A.S. 55  
Greenhalgh A. 333  
Grønbaek H. 495  
Groop L. 1148  
Groop L.C. 249, 629  
Grosso N. 22  
Grunberger G. 889, 1247  
Gschwend S. 286  
Gu H.F. 249  
Guazzarotti L. 898  
Gude N.M. 927, 1133

Guinovart J.J. 507  
Gustafsson I.-B. 312  
Gutiérrez-Merino C. 1238  
Gysemans C. 325  
Gysemans C.A. 567

## H

Haag F. 848  
Haas J. 209  
Haastert B. 147  
Hajdich E. 173  
Halban P. 1281  
Hales C.N. 33  
Hamada Y. 480  
Hämäläinen A.-M. 290  
Hamsten A. 654  
Han Y.-M. 2192  
Hanaoka T. 788  
Hansen L. 123, 237, 1170, 1330  
Hansen T. 123, 237, 1065, 1170, 1330, 2220  
Hanson R.L. 779  
Hara K. 241  
Harder T. 516  
Häring H.U. 1125  
Haruta T. 1258  
Hasegawa A. 788  
Hashim Y. 2227  
Hashimoto T. 614  
Hashimoto M. 373  
Hattersley A. 924  
Hattersley A.T. 517  
Haueter U. 416  
Havekes L.M. 437  
Hawa M. 354, 928  
Hayabuchi Y. 1019  
Hayashi S. 1034  
Haynes T.E. 196  
Heald A.H. 333  
Hébé A. 115, 706  
Hedenbro J. 629  
Hedrich H.J. 1189  
Helgason T. 2098  
Heliövaara M.K. 519  
Henao F. 1238  
Henricsson M. 1148  
Henry D. 889  
Henry R.R. 444  
Hermansen K. 312  
Hickner R.C. 26  
Hill C. 495  
Ho L.F. 966  
Hochberg I. 602  
Hoffstedt J. 654, 1268  
Holkov C. 488  
Holl R.W. 1068  
Holman R. 298  
Holman R.R. 156, 2227  
Holmberg D. 1054  
Holmes W.E. 747  
Holthöfer H. 1274  
Hong S.K. 2187  
Hoogenberg K. 429  
Hopkinson P.K. 2140

Hori H. 1258  
Hotamisligil G.S. 1268  
Hotta N. 480  
Houmard J.A. 26  
Hounsom L. 424  
Hreidarsson A.B. 2098  
Hu F.B. 805  
Huang W. 501  
Huck C. 70  
Hui Y.Y. 1310  
Hulthen U.L. 878  
Humphries S.E. 245  
Hundal H.S. 173  
Huupponen R. 2171  
Hyöty H. 818

## I

Iafusco D. 898  
Ichihara J. 555  
Icks A. 1068  
Iddris I. 659  
Igarashi T. 1354  
Igelseder B. 1111  
Iguchi A. 433  
Ikegami H. 241  
Ilonen J. 63, 290, 818, 1051  
Imamura M. 614  
Inoguchi T. 614  
Ishihara H. 1258  
Ishiki M. 1258  
Isomaa B. 1148  
Issad T. 377  
Itakura Y. 555  
Ito C. 241  
Ito T. 992  
Ivarsson S.A. 249  
Iwamoto K. 373  
Iwamoto Y. 127, 387  
Iwasaki N. 127, 387  
Iwata E. 1354

## J

Jaakkola I. 1274  
James R.W. 1177  
Jansson O.T. 1184  
Jaremko G.A. 865  
Jégou D. 2044  
Jendle J.H. 305  
Jensen J.N. 123, 237  
Jeon Y.J. 713  
Jerums G. 108, 230  
Jettou T.L. 2056  
Jiménez Perepérez J.A. 2038  
Jo N. 1034  
Joglekar C.V. 1197  
Johnston A. 706  
Jones C.J.P. 389  
Jones P. 1019  
Jones S.E. 721  
Jong M.C. 437  
Jörns A. 1189  
Jörnvall H. 1184  
Jude E.B. 2032

Juhan-Vague I. 2025  
 Jun H.S. 271  
 Jung G. 70  
 Juurlink B.H.J. 2004

## K

Kaburagi Y. 992  
 Kadowaki T. 241, 992  
 Kakimoto M. 614  
 Kalix B. 1177  
 Kalliokoski T. 818  
 Kanda S. 433  
 Kaneda Y. 713, 1034  
 Kanter Y. 602  
 Kapiotis S. 95  
 Kapur A. 1094  
 Karlsson E. 1015  
 Karlsson M.G.E. 1140  
 Kaser S. 1111  
 Kasuga M. 373, 555  
 Kasuya Y. 480  
 Kato K. 480  
 Kato Y. 1356  
 Kaufman P.L. 757  
 Kautzky-Willer A. 164  
 Kawachi H. 874  
 Kawaguchi Y. 241  
 Keilingray S. 1197  
 Kellerer M. 1125  
 Kellner K. 1005  
 Kelly D.J. 878  
 Kennedy A. 1102  
 Kessler L. 859  
 Keymeulen B. 40  
 Kim B.-M. 2192  
 Kimpimäki T. 63, 290, 818  
 Kimura S. 992  
 King R.G. 927, 1133  
 Kiriazis Z. 230  
 Kirstein M. 269  
 Kiss G. 220  
 Kiyama H. 1043  
 Kjems L.L. 1339  
 Klöppel G. 1189  
 Knip M. 63, 290, 818, 1274  
 Knuuti J. 184, 2171  
 Kobayashi M. 1258  
 Koch-Nolte F. 848  
 Kohner E.M. 156  
 Kolb H. 1349  
 Kolset S.O. 488  
 Konopelska-Bahu T. 224  
 Koopmans S.J. 437  
 Korhonen S. 63, 290  
 Koskela P. 818  
 Kostyuk E. 1302  
 Kostyuk P. 1302  
 Kowluru A. 89  
 Krause M.W. 81  
 Krebs M. 48  
 Kristinsson S.Y. 2098  
 Krššak M. 48  
 Krug J. 1005  
 Kruglikov I. 1302  
 Kupila A. 63, 290

Kurabayashi M. 788  
 Kuzuya M. 433  
 Kyvik K. 537

## L

Laakso M. 925  
 Laimbacher J. 286  
 Lally F.J. 320  
 Lammers R. 1125  
 Lampasona V. 267  
 Lang-Muritano M. 286  
 Lange V. 269  
 Lao T.T. 966  
 Larsson H. 1998  
 Lauro R. 1281  
 Laville M. 544  
 Lawrence C.L. 1019  
 Le Maout S. 637  
 Leahy J.L. 1026, 2056  
 Lee H.K. 2187  
 Lee H.W. 2187  
 Lee I.K. 713  
 Lee K.-U. 2187  
 Lee K.U. 713  
 Lee Kwai Yan S. 706  
 Lee W.J. 2187  
 Lehto M. 249  
 Leibu R. 602  
 Leiter H. 848  
 Lejon K. 1054  
 Lenhardt A. 151  
 Lenzen S. 1189  
 Leslie R.D.G. 354, 928  
 Leunda-Casi A. 1318  
 Leviev I. 1177  
 Levin K. 824  
 Levy A.P. 602  
 Levy J.C. 2227  
 Lewis G.F. 1989  
 Lezo A. 972  
 Li G. 501  
 Li W.-D. 363  
 Li Z. 889, 1247  
 Liang Y. 2180  
 Liljestone P. 2032  
 Lindi V. 925  
 Links T.P. 429  
 Lipinska I. 1356  
 Lipinski B. 1356  
 Lithell H. 1170  
 Lithell H.O. 2134  
 Litherland G.J. 173  
 Liu S. 805  
 Liu Y.Q. 1026, 2056  
 Logan A. 495  
 Lohmann T. 1005  
 Long D.M. 108  
 Lönnrot M. 818  
 Lönnroth P. 2171  
 Lopes de Faria J.B. 2088  
 López-Miranda J. 2038  
 Lorenzi M. 791  
 Lorini R. 898  
 Lortz S. 1189  
 Louheranta A. 312

Lovari S. 367  
 Ludvigsson J. 1140  
 Ludvik B. 164  
 Luimula P. 1274  
 Luksch A. 95  
 Luo M. 501  
 Luo T.H. 501

## M

Ma J.X. 757  
 Macfarlane W.M. 249  
 MacGregor A. 33  
 Machicao F. 1125  
 Mackay D. 924  
 Mackay I.R. 1199  
 Mackenzie T. 354, 928  
 Madsbad S. 1339  
 Maeda E. 373  
 Maeda K. 433  
 Maffetone A. 312  
 Mahankali A. 2210  
 Mahankali S. 2210  
 Mahar M.T. 26  
 Maier S. 269  
 Maier W. 2140  
 Malaimare L. 1111  
 Malaisse W.J. 393  
 Maliqueo M. 1200  
 Mancía G. 203  
 Mandarino L.J. 2210  
 Mandrup-Poulsen T. 2115  
 Manley S.E. 156  
 Manraj M. 115  
 Manraj M.D. 706  
 Marchetti P. 1281  
 Marčiulionyte D. 16  
 Marfella M.A. 1155  
 Marfella R. 464  
 Marietti G. 1326  
 Marín C. 2038  
 Marinescu V. 1102  
 Marino L. 1155  
 Marjamäki P. 2171  
 Marlier L.N.J.L. 1281  
 Marozzi G. 1326  
 Marselli L. 1281  
 Marshall S.M. 721  
 Martarelli D. 979  
 Martelossi S. 151  
 Martignat L. 2044  
 Martín F. 407  
 Martin X. 859  
 Massa O. 898  
 Massobrio M. 972  
 Mateo J. 693  
 Mathews S.T. 1247  
 Mathieu C. 40, 325, 567  
 Matschinsky F.M. 898  
 Matsubara A. 910  
 Matsuda H. 1354  
 Matsuda M. 2210  
 Matsumoto K. 1034  
 Matteucci C. 1281  
 Matthews D.R. 156  
 Matulla B. 95

Mauschitz R. 209  
 Mavri A. 2025  
 Mawer E.B. 2032  
 Mazzanti L. 979  
 McAmis W.C. 1310  
 McCabe L. 1161  
 McCammon M. 26  
 McKeigue P.M. 2134  
 McKinnon C.M. 1203  
 Meier M.-R. 585  
 Meininger C.J. 196  
 Menato G. 972  
 Mercuri F. 834  
 Merino J.M. 1238  
 Merletti F. 22  
 Meschi F. 898  
 Michieli FDe 972  
 Mifsud S.A. 878  
 Miller B. 602  
 Min B.-H. 2192  
 Minchenko A.G. 1102  
 Miyazaki Y. 2210  
 Mohan V. 1094  
 Molinari L. 286  
 Momoi M.Y. 387  
 Montanya E. 1026  
 Morel P. 859  
 Moretti N. 979  
 Mori F. 1043  
 Mori H. 373  
 Mori T. 129  
 Morinigo R. 309  
 Morishige N. 340  
 Morishita R. 713, 1034  
 Motomura T. 1354  
 Motz E. 834  
 Mudaliar S. 444  
 Muggeo M. 2107  
 Mukherjee R. 444  
 Mullis P.E. 286  
 Muntinga J.H.J. 429  
 Muona P. 290  
 Mutus B. 979  
 Myers M.A. 1199

## N

Nagai R. 788  
 Nagisa Y. 883  
 Nair J.D. 1094  
 Nakagawa S. 883  
 Nakagawa T. 555, 2092  
 Nakagomi S. 1043  
 Nakamura J. 480  
 Nakamura T. 1034  
 Nakashima E. 480  
 Nakashima N. 614  
 Nakhoul F.M. 602, 2237  
 Näslén C. 312  
 Nanjo K. 2092  
 Nappo F. 464, 1155  
 Naruse K. 480  
 Nawata H. 614  
 Neil H.A.W. 224  
 Neri E. 151  
 Nerup J. 123

## Nevin

Nevin P.W. 2056  
 Någren K. 184  
 Nicolay K. 346  
 Nicoletti F. 309, 839  
 Nikoulina S.E. 444  
 Nishida T. 340  
 Niskanen L. 925  
 Nissen M. 848  
 Noessner E. 70  
 Noguchi H. 555  
 Nogues M. 1238  
 Nolan C.J. 927  
 Nordt T.K. 1121  
 North R.V. 700  
 Not T. 151  
 Notkins A.L. 81  
 Novials A. 1064  
 Nowotny P. 48  
 Nuutila P. 184, 2171

## O

Oberholzer J. 859, 1281  
 O'Brien P.C. 1215  
 Obrosova I.G. 1102  
 Odenwald W.F. 81  
 Ogata M. 127, 387  
 Ogawa W. 555  
 Ogihara T. 1034  
 Ohashi H. 387  
 Ohshima Y. 788  
 Okabe I. 387  
 Okada T. 241  
 Okazawa H. 373  
 Okikawa J. 305  
 Omer A. 646  
 Orazioli D. 575  
 Ordovás J.M. 2038  
 Orho-Melander M. 629  
 Osicka T.M. 230  
 Osmond C. 33  
 Osmond D.T.D. 927, 1133  
 Otonkoski T. 1274  
 Owen K. 924  
 Owens D.R. 700

## P

Pacini G. 164  
 Pagano G. 22, 972  
 Page S.R. 2032  
 Palcari F. 203  
 Palgi J. 1274  
 Paliogianni F. 1011  
 Palmén T. 1274  
 Palmer J.P. 2187  
 Palomino A. 1200  
 Pampfer S. 1318  
 Panagiotopoulos S. 108  
 Panerai A.E. 839  
 Paolisso G. 1232  
 Park I.-S. 2192  
 Park J.Y. 713, 2187  
 Park K.S. 2187  
 Parkkola R. 2171

Pastore D. 1281  
 Patel J. 424  
 Paterniti Jr. J.R. 444  
 Patsch J.R. 1111  
 Paulweber B. 1111  
 Pavlovic D. 567  
 Paz-Rojas E., Montilla P. 2038  
 Péault B. 2066  
 Pedersen E. 312  
 Pedersen O. 123, 237, 946, 1065, 1170, 1330, 2220  
 Peltoniemi P. 2171  
 Penfornis A. 859  
 Penha-Gonçalves C. 1054  
 Pérez-Bravo F. 1200  
 Pérez-Jiménez F. 2038  
 Pérez A. 693  
 Permutt M.A. 453, 910  
 Perrott R.L. 700  
 Pessler D. 2156  
 Petersen K.F. 2018  
 Pfeiffer A.F.H. 188  
 Pfeilschifter J. 471  
 Phillips D.I.W. 33  
 Picano E. 2165  
 Pickup J.C. 1202  
 Pieber T.R. 305  
 Pierucci D. 1281  
 Pijl H. 437  
 Pinillos M.D. 2038  
 Pinizzotto M. 104, 1062  
 Pirags V. 188  
 Plagemann A. 516  
 Pocecco M. 151  
 Pociot F. 123  
 Polak K. 95  
 Porta M. 2203  
 Pou J.M. 693  
 Poulsen P. 537  
 Pozzilli P. 268  
 Prager R. 164  
 Pramanik A. 1184  
 Prasanna Kumar K.M. 1094  
 Pratley R.E. 929  
 Prats N. 507  
 Pratt L.M. 230  
 Price R.A. 363  
 Prochazka M. 779  
 Prokop C.-M. 1189  
 Proks P. 1019  
 Proost P. 325  
 Prydz K. 488  
 Puerstner P. 209  
 Pugliese G. 674  
 Pye S. 983  
 Pyke D.A. 354, 928

## Q

Qiang X. 1247  
 Quagliaro L. 834  
 Quartier E. 40  
 Que I. 437

## R

Rabini R.A. 979  
 Radder J.K. 437  
 Radziuk J. 983  
 Ragnarson Tennvall G. 2077  
 Ragno E. 1232  
 Raikou M. 298  
 Rainer G. 95  
 Ramachandran A. 1094  
 Ramjuttun U.S. 115  
 Rao P.V. 1094  
 Rasmussen B.M. 312  
 Ratcliff H. 320  
 Redondo M.J. 354, 928  
 Regoli M. 575  
 Reihl B. 416  
 Reitsma W.D. 429  
 Renard C.B. 1067  
 Ricart W. 518  
 Riccardi G. 312  
 Ricciotti R. 979  
 Rich L. 593  
 Rieusset J. 544  
 Righetti A.E. 2088  
 Rigla M. 693  
 Rigler R. 1184  
 Riou J.-P. 544  
 Ris F. 859, 1281  
 Riste L.K. 333  
 Rivellesse A.A. 312  
 Rizza R.A. 729  
 Robinson D.O. 924  
 Roden M. 48  
 Rodrigo G.C. 1019  
 Rodríguez-Gil J.E. 507  
 Roesler W.J. 2004  
 Rojas I. 1064  
 Romeo S. 268, 367  
 Rosenbauer J. 1068  
 Rosenstock M. 55  
 Rosmond R. 1335  
 Rossi F. 464  
 Rottiers R. 40, 2203  
 Rowley M.J. 1199  
 Rózsai B. 520  
 Rudich A. 55, 2156  
 Ruiz J. 104, 1062  
 Rydén M. 654, 1268

## S

Sacredote P. 839  
 Sadeharju K. 818  
 Sagnella G.A. 245  
 Saï P. 2044  
 Sakariassen K.S. 2180  
 Sampayo J. 333  
 Samson C. 775  
 Sandhofer A. 1111  
 Sandler S. 839, 1015  
 Sanjeevi C.B. 515  
 Sanke T. 2092  
 Saris W.H.M. 2013  
 Sasaoka T. 1258  
 Sassa Y. 340  
 Sato E. 1043  
 Satoh S. 992  
 Saukkonen T. 1051  
 Saunders R.A. 757  
 Savilahti E. 1051  
 Savola K. 818  
 Savolainen H. 290  
 Savolainen P. 818  
 Sbrissa D. 1247  
 Schaeffer Jr. R.C. 1310  
 Schäfer D. 416  
 Scharfmann R. 2066  
 Schatz H. 188  
 Schaupt L. 305  
 Schendel D.J. 70  
 Scherbaum W.A. 1005  
 Scherk G. 188  
 Schmetterer L. 95  
 Schmut O. 209  
 Schneider B. 164  
 Schoenle E.J. 286  
 Schuit F.C. 40  
 Schultz C.J. 224  
 Schwenk W.F. 729  
 Scirpoli M. 267  
 Seino S. 906  
 Seissler J. 1005  
 Sekihara H. 992  
 Selam J.-L. 1296  
 Selby P.L. 2032  
 Selén G. 2180  
 Sentinelli F. 367  
 Sentocnik J.T. 2025  
 Service F.J. 1215  
 Shah P. 729  
 Shepherd D. 2227  
 Shepherd L.M. 249  
 Shi F. 1221  
 Shield J. 924  
 Shin Y.-J. 2192  
 Shintani A. 883  
 Shisheva A. 1247  
 Shishkin V. 1302  
 Shmigol A. 1302  
 Shulman G.I. 48  
 Siebenhofer A. 305  
 Signorile A. 972  
 Signorini A.M. 1326  
 Sima A.A.F. 889, 1247  
 Simán C.M. 389  
 Simell O. 63, 290, 818  
 Simell T. 290  
 Simm A. 269  
 Singh R. 129  
 Siniscalchi M. 1155  
 Sipilä H. 184  
 Siquier K. 377  
 Sir-Petermann T. 1200  
 Sivenius K. 925  
 Sjoelie A.-K. 2203  
 Sjöroos M. 290  
 Skoog T. 654  
 Skorecki K. 602  
 Skoudy A. 407  
 Smit A.J. 429  
 Smith C. 495  
 Smith G. 784

Smith T. 249  
 Snehalatha C. 1094  
 Snieder H. 33  
 Soban M. 151  
 Sobel B.E. 1121  
 Soltész G. 520  
 Somogyi J. 220  
 Song H.S. 713  
 Soria B. 407  
 Soulis T. 108  
 Speciale A.M. 309  
 Stacher G. 1080  
 Staffolani R. 979  
 Stallmeyer B. 471  
 Standen N.B. 1019  
 Stanton K. 593  
 Stegnar M. 2025  
 Steindorf J. 1005  
 Steingrímsson E. 2098  
 Stevens L. 2203  
 Stevens M.J. 1102  
 Stevens R. 298  
 Stingl H. 48  
 Stockert C.M. 1102  
 Storlien L.H. 312  
 Strack V. 1125  
 Stratton I.M. 156, 298  
 Strazzullo P. 245  
 Strindberg L. 2171  
 Strosberg A.D. 377  
 Sugimoto K. 889  
 Sulli N. 898  
 Sullivan J.T. 2018  
 Sun G. 2231  
 Sun X.-J. 2056  
 Sweeney M. 1296  
 Szelényi J. 220

## T

Taboga C. 834  
 Taiji M. 555  
 Takala T.O. 184  
 Takamiya A. 1043  
 Takeda M. 1043  
 Talmud P.J. 245  
 Talseth B. 2098  
 Tapsell L.C. 312  
 Taskinen M.-R. 1148  
 Tatarkiewicz K. 646  
 Taylor W. 333  
 Temler E. 104, 1062  
 Temple I.K. 924

Tesfaye S. 1973  
 Thallas V. 108  
 Thams P. 738  
 Thivolet C. 859  
 Thomas A. 416  
 Thörne A. 1268  
 Thorolfsdóttir E.T. 2098  
 Thorsson A.V. 2098  
 Tiedge M. 1189  
 Tobe K. 241  
 Tomkin G.H. 657  
 Tomlinson D.R. 424  
 Tommasini A. 151  
 Tomonaga O. 127  
 Tomono S. 788  
 Toni S. 898  
 Tonini G. 151  
 Tonutti L. 834  
 Torbjörnsdóttir T.B. 865  
 Torre G. 151  
 Torresani T. 286  
 Tortul C. 151  
 Toso C. 859  
 Toyama R. 81  
 Trautner C. 147  
 Trevisiol C. 151  
 Trinh-Trang-Tan M.-M. 637  
 Triplitt C. 2210  
 Trotman W.E. 2056  
 Tsuchida A. 555  
 Tsunoda K. 2092  
 Tuck Z. 1161  
 Tuomi T. 1148  
 Tura A. 164  
 Turner R.C. 156  
 Turpeinen A.K. 184

## U

Ubels F.L. 429  
 Uchiyama T. 788  
 Ueki K. 992  
 Ukkola O. 2231  
 Ullrich A. 1125  
 Umeda F. 614  
 Urbonaite B. 16  
 Urhammer S.A. 1065, 1170, 2220  
 Usac E.F. 1064  
 Utsugi T. 788  
 Uusitupa M. 312  
 Uusitupa M.I.J. 184, 925

## V

Vaag A. 537  
 Vagenakis A.G. 1011  
 Valussi M. 151  
 Van Autreve J. 40  
 van Dam R.M. 805  
 Van der Auwera B.J. 40  
 van Eijsden P. 346  
 Van Schilfgaarde R. 646  
 Vasan S. 108  
 Vasseur F. 775, 786  
 Vaxillaire M. 786  
 Veglio M. 2203  
 Velasco M.J. 2038  
 Velho G. 517  
 Vella A. 729  
 Ventura A. 151  
 Vér Á. 220  
 Verlohren H.-J. 1005  
 Vessby B. 312  
 Vestergaard H. 237  
 Vidal H. 544  
 Vijay V. 1094  
 Virtanen K.A. 2171  
 Virtanen S.M. 63  
 Vitale M. 367  
 Vitali E. 22  
 Vølund A. 1339  
 Voitenko N. 1302  
 Vuong T.T. 488

## W

Wada T. 1258  
 Wagle D. 108  
 Wahl C. 775  
 Wahl P. 747  
 Wahren J. 889, 1184  
 Waldhäusl W.K. 1, 48, 164  
 Walk T. 70  
 Wallberg-Henriksson H. 2180  
 Walter U. 269  
 Wang S. 1274  
 Wank R. 70  
 Wasson J.C. 910  
 Waterworth D.M. 245  
 Watts G.F. 593  
 Wedekind D. 1189  
 Weets I. 40  
 Weir G.C. 646  
 Weisberg S.J. 363

Weiss H. 1189  
 Weiss U. 209, 389  
 Welling C.M. 910  
 Weng J. 249  
 Weyer C. 929  
 White A. 333  
 Wibell L. 249  
 Wice B.M. 453  
 Wicks P.D. 245  
 Wilkin T.J. 914  
 Wilkinson-Berka J.L. 878  
 Williams A.J.K. 16  
 Williams G. 1202  
 Wiltshire S. 2227  
 Witt C. 514  
 Wolf M.B. 1310  
 Wolford J.K. 779  
 Wolzt M. 95  
 Wu G. 196  
 Wu L. 2004

## Y

Yajnik C.S. 1094, 1197  
 Yamamoto-Honda R. 992  
 Yamamoto I. 1354  
 Yan W. 196  
 Yasuda K. 241  
 Yasuda Y. 480  
 Yokokawa H. 127  
 Yoon J.W. 271  
 Yoshida A. 1043  
 Yu H.Y. 614  
 Yu L. 354, 928  
 Yuan W.T. 501

## Z

Zethelius B. 2134  
 Zhang D. 757  
 Zhang W. 889  
 Zhao J.J. 501  
 Zhao Y. 501  
 Zhong Z.-H. 1184  
 Ziegler D. 1296  
 Zierath J.R. 2180  
 Zilberfarb V. 377  
 Zimmet P.Z. 1199  
 Zito G.A. 1232  
 Zoabi M. 602  
 Zoabi R. 602  
 Zuckerman W.A. 363



## Subject Index: Volume 44

KEY: A = Abstract in Supplement 1; b = Book Review; c = Correspondence; r = Review, Debate or Editorial; S = paper in Supplement 2 (Sept 2001); w = Workshop report

### A

- A-cell, islet – clusterin expression during islet B-cell regeneration 2192
- HNF-3 $\beta$  A 71
- insulin resistance 1998
- K<sup>+</sup><sub>ATP</sub> channel A 124
- Acetaminophen [*see* Paracetamol]
- Acetylcholine – islet B-cell, effect on A 132
- Acetylcholinesterase – oligomerisation – streptozotocin-diabetic rat 220
- Activator protein [*see* Transcription – factor]
- Activin A A 247
- Adhesion molecule – coronary heart disease and A 306
- erectile dysfunction, in 1155
- hyperglycaemia and 674 r
- insulin tolerance induction, role in A 9
- intercellular – diabetic nephropathy, role in A 266
- expression – diabetic retinopathy and A 288
- islet B-cell cytotoxicity, role in A 142
- mesangial expression – *Erratum* 391
- plasma – glycaemic control and A 305
- lipoproteins, regulation by A 164
- selectin – complications of diabetes and A 50
- plasma – diabetic foot ulcer and A 3
- serum – type 1 diabetes A 74
- Adipocyte – 3T3-L1 – GLUT4 expression 2156
- insulin, effect of – long-term 55
- tumour necrosis factor, effect of 55
- brown – IGF-1 receptor-deficient A 79
- differentiation – dexamethasone, effect of – human PAZ6 cells 377
- fatty acid binding protein 1268
- GIP, effect of A 195
- glucose transport A 44
- GLUT4 expression – oxidative stress, effect of 2156
- GLUT5 fructose transporter A 157
- insulin signalling – rosiglitazone, effect of 544
- lipogenesis A 177
- pre- – PAZ6 cell – dexamethasone, effect of 377
- rosiglitazone, effect of A 27, A 28
- Adiponectin polymorphism – diabetic macrovascular disease and A 311
- type 2 diabetes A 38
- Adipose tissue – abdominal – PAI-1 expression 1121, 2025
- brown – uncoupling protein 1 946 r
- glucose uptake – measurement in vivo – microdialysis + PET 2171
- insulin resistance, in A 6
- obesity, in A 182
- regional variation – adipocyte fatty acid binding protein 1268
- TNF $\alpha$  secretion – TNF $\alpha$  polymorphisms and 654 c
- ADP-ribosyl transferase – ART2.2 – T-cell 848
- Adrenaline – insulin secretion, effect on A 171
- Adrenoceptor polymorphisms –  $\beta$  – obesity, in A 185
- $\beta_2$  – obesity and A 95
- serum non-esterified fatty acids and 629
- $\beta_3$  – insulin resistance syndrome 115
- serum non-esterified fatty acids and 629
- Adrenomedullin – diabetic retinopathy and A 290
- AGE [*see* Glycation – advanced end-product]
- Age – diabetic retinopathy progression and 156
- type 1 diabetes incidence and 22
- Ageing – diabetes care A 248
- glycaemic control and A 230
- islet B-cell function, effect on in human A 138
- type 2 diabetes and – China A 106
- Albuminuria [*see also* Nephropathy] – diabetes – epidemiology S 37
- Alcohol (ethanol) – metabolic effects A 192
- Aldose reductase – diabetic neuropathy, role in 1973 r
- inhibitor – glucose-induced macroangiopathy, effect on 480
- Aldosterone – oral glucose tolerance test, effect of A 224
- response to ACTH in diabetic nephropathy A 266
- Alpha-2-macroglobulin – polymorphism – type 2 diabetes 2227
- ALT-946 – advanced glycation end-product inhibitor 108
- Altitude – insulin sensitivity, effect on A 203
- Aminoguanidine – advanced glycation end-product inhibitor 108, 129 r
- islet B-cell Fas-expression, effect on A 142
- renoprotection 230
- Aminoimidazole-4-carboxy-amide-1- $\beta$ -D-ribofuranoside – glucose production, effect on 2180
- Amputation, lower-limb [*see also* Foot]
- diabetes – epidemiology A 279, A 280, A 282, S 3, S 65, S 78
- histopathology A 4
- Amylin – analogue – pramlintide – insulin therapy adjunct A 237
- islet B-cell, effect on – neonatal rat 1015
- islet localisation A 140, A 141
- mutation A 89
- type 2 diabetes and 906, 1064 c
- Androgen, serum – diabetic retinopathy risk factor in women A 286
- type 1 diabetic women A 223
- Angiogenesis – hyperglycaemia and 674 r, A 10
- inhibitor – plasminogen kringle 5 757
- marker – CD31 471
- retina A 40
- intravitreal plasminogen kringle 5, effect of 757
- Angioplasty – restenosis following – cilostazol, effect of 1034
- Angiotensin converting enzyme – diabetic nephropathy and A 35
- inhibitor – advanced glycation end-products, effect on A 319
- cizalaprill – renoprotection A 265
- complications of diabetes, effect on 1118
- insulin sensitivity, effect on A 191
- pentoxifyphyline combination therapy A 271
- ramipril 878, A 191, A 319
- renal TGF- $\beta$  receptor expression, effect on 495
- renoprotection 230, 878, A 271, A 275, A 276
- therapy A 275, A 276
- polymorphism – cardiovascular risk in diabetes A 312, A 313
- diabetic nephropathy and 520 c
- serum – hypoglycaemia risk in type 1 diabetes and A 67
- Angiotensin II – diabetic nephropathy, role in 1957 r
- receptor – antagonist – candesartan cilexetil 883
- glomerular nephrin expression, effect on 874
- irbesartan 874
- renoprotection 874, 878, A 35, A 275, A 276
- retinopathy, protection against 883

- - - skeletal muscle glucose transport, effect on A158
- - - therapy A275, A276
- - - valsartan 878
- - - diabetic retinopathy and A40
- vascular smooth muscle cell, effect on - PAI-1 expression 713
- Angiotensinogen - adipose tissue, expression by A34
- polymorphism - diabetic nephropathy and A262
- Animal model - diabetes - type 2 A147
- Antibiotic selection in diabetes A224
- Antibody - bovine serum albumin - type 1 diabetes and A84
- CD3 monoclonal - immunotherapy for type 1 diabetes 521r
- elastin - diabetic retinopathy risk and A285
- GAD - assay - standardisation A74
- - latent autoimmune diabetes in adult, in - clinical heterogeneity 1005
- - neonatal A31
- - normal children, in 16
- IA-2 - assay - standardisation A74
- IgG subclasses and type 1 diabetes A84
- - neonatal A31
- - normal children, in 16
- insulin auto- - A74
- - prediction of Type 1 diabetes, in A256
- islet-cell /see also Autoimmunity - islet; Prediction - type 1 diabetes/
- - 12 - prediction Type 1 diabetes 267c
- - latent autoimmune diabetes in adult 1005
- - normal children, in 16
- Antigen - cow's milk - immune response to in type 1 diabetes 1140
- islet-cell 521r
- - CD38 A74
- - IA-2 /see Tyrosine - phosphatase - IA-2/
- - importin  $\beta$  A32
- - processing A9
- Antioxidant -  $\alpha$ -lipoic acid - diabetic autonomic neuropathy, effect on A14
- - erectile dysfunction, use in A295
- -  $\gamma$ -linolenic acid diester 424
- - lipid & protein oxidation, effect on in diabetes A320
- - platelet function, effect on A292
- - retinal protection 1102
- enzyme - plasma - coronary heart disease and A305
- - retina, expression in A289
- - superoxide dismutase 2 polymorphism and type 1 diabetes A83
- experimental diabetic neuropathy, effect on 424
- L-2264 A226
- metabolic effects of A155, A156
- taurine - growth hormone diabetogenesis, effect on A168
- - retinal protection 1102
- Apolipoprotein - C1 - overexpressing mouse - metabolism 437
- C3 - polymorphism - coronary heart disease and A311
- C3-482C > T - glucose tolerance and - ethnicity, effect of 245
- E - polymorphism - type 2 diabetes 2227
- E2 - remnant lipoprotein - mesangial cell, effect on A264
- Apoptosis - BB/S diabetic rat, in 320
- islet B-cell A40, A41
- - signalling 2115r
- retina 791r
- Aquaporin - streptozotocin-diabetic rat, expression in 637
- Arsenite - adipocyte, insulin-like effect on A158
- ART2.2 - T-cell expression 848
- Artery - aorta - distensibility - diabetic autonomic neuropathy and A291
- compliance - diabetes 203
- distensibility - bio-impedance method 429
- - echotracking techniques 203
- intima + media thickness in diabetes 203, A306
- - albuminuria and A264
- pulse-wave velocity A186
- - parental type 2 diabetes and A323
- stiffness - insulin, effect of A306
- Ascorbic acid - diabetic macrovascular disease, effect on A320
- Atherogenesis - macromolecular protein complex and 1356c
- Autoimmunity - islet A74, A75, A103-A105
- - diabetes, in - early adulthood 40
- - - gestational A241
- - - type 1 A101, A149, A150, A153, A154
- - GAD-specific T-cells - HLA restriction 70
- - genetic susceptibility to type 1 diabetes and 63
- - immunotherapy 521r
- - infant feeding and 63
- - mitochondrial gene mutation and - type 1 diabetes 2187
- - seroconversion - enterovirus serology 818
- organ-specific - childhood diabetes, in A256
- polyendocrine - coeliac disease and - type 1 diabetes 151
- thyrogastric - type 1 diabetes A152, A153
- type 1 diabetes, in A74, A75
- Averrhoa bilimbi* - hypoglycaemic action A227
- B**
- Bafilomycin - islet B-cell cytotoxicity 1199c
- Basement membrane - corneal epithelial - confocal microscopy 340
- BB rat /see Rat - BB/
- B-cell, islet - apoptosis A142-A144
- - GLP-1 analogue, effect of A19
- - LEW.1AR1/Ztm-*iddm* rat 1189
- - nerve growth factor withdrawal, induced by 1281
- - signalling 2115r
- artificial /see Insulin - infusion - closed-loop/
- $\text{Ca}^{2+}$  - oscillation A51, A134, A147
- calcium signalling A129, A124, A133, A134
- cytotoxicity A40, A41, A136, A140-A146
- - cytokine signal transduction 2115r
- - gene expression A30
- - interferon- $\gamma$  signalling in 567
- - microbial toxin - bafilomycin A1 1199c
- - taurine, protection by A10
- - virus-induced diabetes 271r
- denatonium, effect of A51
- differentiation 1071r, A70, A71, A117-A119
- - GLP-1, effect of A193
- - PDX-1, role of 1203r
- electrical activity - coupling A136
- exocytosis A133-A135
- FGF signalling 1071r
- function - meal tolerance test A137
- - type 1 diabetes, residual in A219
- gene expression A30, A31, A51, A52, A119-A121
- glucose signalling A128, A130-A131
- glucotoxicity A140
- GLUT2 1071r
- glycogen 393r
- Id protein expression - insulin secretagogues, effect of 453
- imaging 393r
- ion flux A20
- isolated - metabolism A124
- lipotoxicity A140
- maturation A31
- metabolic signalling A122-A124
- mitochondria - GTP 89
- monocyte chemoattractant protein-1 expression 325
- nephrin expression 1274
- nerve growth factor and NGF receptor expression 1281
- pentose phosphate shunt - 60% pancreatectomy, following 1026
- quantification 393r
- regeneration A70, A71, A117-A119
- - amylin, effect of - neonatal rat 1015
- - dipeptidylpeptidase IV inhibitor, effect of A192
- - GLP-1 analogue, effect of A197

## B-cell

- B-cell, islet – regeneration
    - islet clusterin expression 2192
    - partial pancreatectomy, following – rat 1026, 2056
    - signalling A 19–A 20, A 122–A 132
    - stem cell differentiation protocol 407r
    - succinyl-CoA synthetase – isoforms 89
  - Bcl-2 – islet B-cell transfection A 143
  - Beacon – energy metabolism, role in A 169
    - gene A 54
    - localisation A 183
  - Benfluorex – hypoglycaemic effect A 236
  - Benzodiazepine receptor, peripheral – islet B-cell A 40
  - Beta-adrenergic antagonist – adipocyte, effect on A 184
  - Betacellulin – pathways A 118
  - Bio-impedance – blood volume distribution measurement 429
  - Bioluminescence imaging – firefly luciferase A 169
  - Birth – cohort – type 1 diabetes incidence 22
  - Birth-weight – adult energy homeostasis and – maternal MODY-2 pregnancy 516c
    - low – blood pressure following – twin study 33
    - glucose tolerance following A 13
    - twin study 33
    - insulin resistance following A 246, A 255
    - metabolic sequelae A 29, A 243, A 244
    - renal effects in rat 721
    - type 2 diabetes following – paternal effect 1197c
  - Bisphosphonate – pamidronate – Charcot foot, effect on 2032
  - Blindness – diabetes, in A 49, 147
  - Blood – flow – C-peptide, effect of in type 1 diabetes A 323
    - choroidal – insulin & glucose, effect of 95
    - nerve 1973r
    - ocular – pulsatile – hyperglycaemia, effect of 700
    - renal – insulin & glucose, effect of 95
    - glucose /see Glucose/
    - pressure – diabetes, in A 272–A 274
    - glomerular function and 865
    - low birth-weight, following – twin study 33
    - pulse pressure A 46
    - toe A 279
    - volume – arterial/venous redistribution in type 1 diabetes 429
  - Body weight – diabetes risk factor 1221
    - insulin resistance A 244, A 246
    - plantar foot pressures and A 279
    - reduction – abdominal adipose tissue, effect on 2025
  - regulation – uncoupling proteins and 946r
  - Bombina variegata* – insulinotropic peptides from A 135
  - Bone mineral density in diabetes A 223
  - Brain – diabetes, effect of – streptozotocin-diabetic rat A 296
    - hypoglycaemia, effect of A 217
    - metabolism in diabetes A 299
    - magnetic resonance spectroscopy – rat 346
  - Breast-feeding /see Infant feeding/
  - Butyrylcholinesterase K polymorphism – type 2 diabetes 2227
- ## C
- Ca<sup>2+</sup>-ATPase – sarco-endoplasmic reticulum – islet B-cell A 124
  - Caenorhabditis elegans* – IA-2 gene homologues 81
  - Calcium – channel – blocking agent – nerve, effect on in streptozotocin-diabetes 1302
    - receptor – insulin-secreting cell A 127
    - polymorphism – type 2 diabetes and A 87
    - signalling – neuron – experimental diabetes 1302, A 296
  - Calpain 10 A 38, A 94
  - Camillo Golgi Lecture 2001 *EASD News Section 10/01* 44
  - CAMK /see Kinase – protein – Ca<sup>2+</sup>/calmodulin dependent/
  - Cancer – large bowel – diabetes and A 60, A 225
  - Capillary permeability – coronary reperfusion injury, in 2165
    - protein kinase C and 659r
    - retina – nitric oxide synthase and 1043
  - Capsaicin analogue – resiniferatoxin A 178
  - Carbachol – islet B-cell, effect on A 126
  - Carbonic anhydrase – islet A 123
  - Carbonylation – advanced glycation end-product toxicity, role in 129r
    - protein /see Protein/
  - Carboxymethyl-lysine, N<sup>ε</sup> – renal epithelial cell, effect on 488
  - Cardiovascular – mortality – diabetes S 14
    - risk assessment – diabetes A 253
    - risk factor – β<sub>3</sub>-adrenoceptor polymorphism 115
    - China S 82
    - diabetes diagnostic criteria and 26
    - diabetes, in A 46, A 47, A 273, A 113, S 54
    - homocysteine – mechanism 979
    - hyperinsulinaemia A 8
    - IGFBP-1 and 333
    - maternal diabetes, effect of A 43
    - pancreas transplantation, improvement following A 73
    - physical training, effect of 2134
  - postprandial hyperglycaemia 2107r
  - screening in diabetes A 313–A 315
  - thiazolidinedione therapy, effect of A 221, A 222
  - Castelli Pedrolì Prize 2001 *EASD News Section 10/01* 44
  - Catecholamine, plasma – insulin resistance and A 184
    - postural response in advanced diabetic nephropathy A 292
  - CD14 – polymorphism – insulin sensitivity and A 23
  - CDX-1 /see Transcription – factor – caudal-related homeodomain-1/
  - Celiac /see Coeliac/
  - Cell – islet /see A-cell, islet; B-cell, islet; Islet, pancreatic/
  - Cell – signalling /see B-cell, islet; Insulin – receptor; Insulin – secretion; Kinase/
  - Ceramide – skeletal muscle insulin signalling, effect on 173
  - Chelating agent – deferoxamine – experimental diabetic neuropathy protection 621
  - Childhood and adolescence – diabetes A 256, A 257
    - blood pressure monitoring 865
    - microalbuminuria screening A 262
    - quality of care A 248
    - quality of life A 259
    - renal biopsy 865
    - diabetes care 1068c
  - Cholecystokinin – octapeptide – pancreatic growth, effect on A 180
  - Cholecystoparesis, diabetic A 300
  - Cholesteryl ester transfer – protein – polymorphism – insulin resistance syndrome A 95
  - Clamp – euglycaemic A 206
    - euglycaemic hyperinsulinaemic – glucagon secretion 1998
    - hyperglycaemic hyperinsulinaemic – platelet protein kinase C 188
  - Claude Bernard Lecture – 2000 – W J Mallais 393r
  - 2001 *EASD News Section 10/01* 43
  - Clusterin – islet B-cell regeneration, islet expression during 2192
  - Coagulation system – diabetes type 2, in A 272
    - factor XIII – polymorphism – coronary heart disease and A 312
    - fibrinogen – hyperinsulinaemia, effect of A 188
    - glimepiride, effect of A 216
    - physical training, effect of in diabetes 693
    - tissue factor pathway inhibitor 693
  - Coeliac disease – relatives of type 1 diabetic patients 1051
    - type 1 diabetes and A 102, A 152, A 153
    - other autoimmune disease and 151
  - Cognitive function – advanced glycation end-products and A 34
    - hypoglycaemia, effect of A 67, A 217
    - impaired – diabetes education in A 251



- Collagen – glycation cross-links – matrix metalloproteinases, effect on 433
- Compartmental analysis – fasting glucose turnover in type 2 diabetes 983
- Complications of diabetes 270b
- advanced glycation end-products and A319
  - ambulatory blood pressure monitoring and A274
  - cardiovascular – quality of care A249
  - epidemiology A114, A115
  - EURODIAB study – diabetic retinopathy progression 2203
  - inflammatory markers and A316, A317
  - insulin resistance syndrome, effect of 1148
  - oxidative stress and 834, A155, A156
  - prevention – prospective study in type 2 diabetes 1118
  - protein kinase C and 657r, 659r
  - risk factor – pregnancy A42
  - vascular – pathogenesis 674r
  - WHO Multinational Study of Vascular Disease in Diabetes S1–S87
- Concanavalin A – viscometric affinity glucose sensor, use in 416
- Contraception – diabetes A245
- Coronary */see* Heart – coronary/
- Cortisol – salivary – melanocortin-4 mutation and 1335
- Cos-1 cell – transfected – IRS mutants 992
- Cost */see* Economics/
- Cow's milk */see* Infant feeding/
- C-peptide – cell-membrane binding A158
- myocardial function, effect on in type 1 diabetes A68
  - nerve function, effect on in streptozotocin-diabetic rat A14
  - neuroblastoma cells, effect on A297
  - renal effect A156
  - serum – latent autoimmune diabetes in adult A105
  - signalling A156–A159
  - skeletal muscle cell, effect on – insulin receptor signalling 1247
  - therapy – diabetic neuropathy, effect on – BB/Wor rat 889
- C-reactive protein – complications of diabetes and A315–A317
- endothelial function association in diabetes A315
  - insulin resistance syndrome and A178
  - rosiglitazone, effect of A222
  - sepsis marker in decompensated diabetes 1011
  - type 2 diabetes and A115
- Creatine phosphate – islet B-cell signalling, role in A128
- Cyclo-oxygenase expression – type 1 diabetes and A99
- Cystatin C – serum – diabetic nephropathy marker A267
- Cytochalasin – insulin secretion, effect on A122
- Cytokine – complications of diabetes and 674r
- islet B-cell cytotoxicity A40, A41
  - signal transduction 2115r
- ## D
- Decoy oligodeoxynucleotide – AP-1 – PAI-1 expression, effect on 713
- Dehydroepiandrosterone – adipocyte glucose uptake, effect on A78
- Dextran – sulphate – tritiated – lysosomal function, assessment of 230
- viscometric affinity glucose sensor, use in 416
- DHEA */see* Dehydroepiandrosterone/
- Diabetes (mellitus) – aetiology – accelerator hypothesis 914r
- care – childhood 1068c, A256
  - controversial areas 1202b
  - economics */see* Economics of diabetes care/
  - hospital in-patients A228
  - information technology */see* Information technology/
  - psychological aspects */see also* Quality of life/ A258, A259
  - quality A16, A17, A247–A249, A281
  - classification A103–A105
  - control */see* Glycaemic control/
  - Control & Complications Trial (DCCT) – retinopathy 1215
  - diagnostic criteria 26, A113, A114, A108–A109, A230
  - pregnancy A241, A246
  - fibrocalculus pancreatic A102
  - gestational A42, A43, A240–A242
  - $\alpha$ -thalassaemia trait and 966
  - embryopathy A12
  - epidemiology A106
  - glucose disposal following A185
  - insulin resistance syndrome following A246
  - leptin 164
  - metabolism A28, A29
  - MODY-2 families – metabolic study in adult offspring 516c
  - placenta – glucose dynamics – *Erratum* 927
  - glucose transport 1133
  - risk factor – dietary saturated fat 972
  - heterogeneity A103–A105
  - accelerator hypothesis 914r
  - latent autoimmune in adult A103–A105, A153, A154
  - genetics A75
  - heterogeneity 1005
  - protein-deficiency A102
  - transient neonatal 924c
  - type 1 – aetiology A98–A100
  - aetiology – cow's milk 1140
  - dietary microbial toxins 1199c
  - enterovirus A32
- HLA restriction of GAD recognition 70
  - infant feeding 63
  - perinatal factors A84
  - sex 40
  - virus 271r, 818
  - animal model – LEW.1AR1/Ztm-iddm rat 1189
  - clinical remission A149, A154
  - disease-modifying therapy */see also* Mouse – NOD; Rat – BB/ 521r, 1349r
  - oral insulin A151
  - heterogeneity A103–A105
  - age at onset – twin study 354
  - twin study – *Erratum* 927
  - immunology – experimental A9, A10
  - infancy – with acute liver failure A257
  - islet B-cell function, residual – immunotherapy 1349r
  - mitochondrial gene mutation and 2187
  - risk factor – sex 3r
  - type 2 – aetiology – uncoupling proteins 946r
  - animal model 2180, A54, A55
  - economic model 2140
  - heterogeneity – age – syntaxin A polymorphism 2092
  - insulin secretion in 929r
  - insulin treatment – syntaxin A polymorphism and 2092
  - pathogenesis 929r
  - pathophysiology A183
  - prevention – diet 805r
  - risk factor – Canada 1221
  - sex 3r
  - virus-induced 271r
- Diabetic foot */see* Foot – diabetes/
- Diacylglycerol – glucose uptake, effect on – skeletal muscle A79
- protein kinase C pathway – complications of diabetes and 659r
  - vascular smooth muscle, synthesis by 614
- Diazoxide – islet B-cell, effect on A128
- DIDMOAD (Diabetes insipidus, diabetes mellitus, optic atrophy & deafness) */see* Wolfram/
- Diet – advanced glycation end-products in A33, A318
- carbohydrate – composition – diabetes risk factor 805r
  - glycaemic index 805r
  - diabetes A230
  - education – primary school A250
  - fat – composition – leptin secretion, effect on in rat A63
  - high – glucose metabolism effects A63, A175
  - low 2038
  - saturated – diabetes risk factor 805r
  - gestational diabetes and 972
  - insulin sensitivity, effect on 312
  - reduction, glucose metabolic effects of 2038

## Diet

### Diet – fat

- trans – diabetes risk factor 805 r
- fibre – diabetes risk and 805 r
- Mediterranean 2038
- N<sup>ε</sup>-(carboxymethyl)-lysine – albumin excretion rate, effect on A 318
- prediction of type 2 diabetes using A 116
- pregnancy – fat composition – glucose tolerance and 972
- protein – diabetes-promoting in models of type 1 diabetes A 100
- restricted – diabetic nephropathy, effect on A 271
- prudent – glucose metabolic effects in healthy people 2038
- sodium – diabetic nephropathy, effect in A 267
- very low calorie A 182
- skeletal muscle fatty acid binding protein, effect on 2013
- Dimethylthiourea – neuroprotective in diabetic rat 1161
- Dipeptidylpeptidase – IV – inhibitor – islet B-cell regeneration, effect on A 192
- Down's syndrome – diabetes in A 256
- proinsulin:insulin ratio and oxidative stress in 788 c
- Drosophila melanogaster* – IA-2 gene homologues 81
- Dyslipidaemia – complications of diabetes and A 300
- diabetes diagnostic criteria and 26
- diabetic retinopathy risk factor S 22
- GLP-1 analogues, effect of A 196–A 198
- lipid-lowering therapy – type 2 diabetes A 301
- paraoxonase polymorphism 104
- PPAR $\gamma$  polymorphism and 1354 c
- thiazolidinediones, effect of A 37, A 199, A 200, A 221, A 222
- type 2 diabetes, in A 164–A 166

## E

- EASD – Diabetes Education Study Group (DESG) *EASD News Section 4/01 21*
- Diabetic Foot Study Group (DFSG) *EASD News Section 4/01 19*
- General Assembly (*Suppl 1*) 1
- Neuropathy Study Group (Neurodiab) *EASD News Section 4/01 19*
- Scientists' Training Course *EASD News Section 2/01 13*
- EASD / Eli Lilly Research Fellowship *EASD News Section 10/01 46*
- EASD / JDRF Oxford Workshop 2001 *EASD News Section 10/01 49 w*
- EASD / Sankyo Insulin Resistance Project Award 2001 *EASD News Section 10/01 47*

### Economics of diabetes care A 252,

- A 253
- China A 17
- foot ulcers & amputation 2077
- metformin therapy in UKPDS 298
- model 2140
- Editorial – new millennium 1 r
- Education – diabetes A 250
- EASD Study Group (DESG) *EASD News Section 4/01 21*
- foot care A 24, A 259
- health professionals A 250
- nutrition A 250
- Efaroxan – insulin secretion, effect on A 135
- Elderly [*see* Ageing/
- Embryopathy A 12
- diabetic – epidemiology A 242
- mitochondrial swelling, role of 389 c
- oxidative stress, role of 766
- glucose-induced – pre-implantation 1318
- Endosulfine – insulin-secreting cell, effect on A 124
- Endothelial – cell – culture – trace metals in medium, effect of 1310
- diabetic neuropathy and 1973 r
- glucosamine synthesis 196
- glutamine:fructose-6-phosphate amidotransferase 196
- insulin endocytosis 605
- oxidative stress, effect of – insulin endocytosis 605
- retina 791 r
- umbilical vein, human – monocyte chemoattractant protein-1 expression A 318
- function A 11
- cilostazol, effect of 1034
- diabetes, in 518 c, A 323, A 324
- microalbuminuria association 593
- diabetic retinopathy and A 39
- digital photoplethysmography 706
- erectile dysfunction, in 1155
- folate, effect of in insulin resistance A 323
- glucose tolerance and – Mauritius 706
- marker – thrombomodulin, plasma 693
- obesity, in A 324
- physical training, effect of in diabetes 693
- protein kinase C and 659 r
- Endothelin – diabetic nephropathy and 1957 r
- Energy – expenditure [*see also* Exercise/
- uncoupling proteins and 946 r
- Energy – metabolism – thermic effect of glucose in type 2 diabetes A 206
- Epidemiology [*see also* Mortality/
- blindness in diabetes 147, S 31
- diabetes – sex 3 r, 40
- type 1 A 75, A 96–A 98
- enterovirus serology and A 103

- Italy 22
- Lithuania vs England 16
- secular trend 22
- secular trend – young children 286
- sex 3 r
- Switzerland 286
- type 2 A 7, A 8, A 106–A 114
- India 1094
- risk factors – Canada 1221
- sex 3 r
- diabetic foot A 279–A 281
- diabetic nephropathy A 262
- diabetic neuropathy A 298
- diabetic retinopathy A 49, A 50, A 285, A 286
- enterovirus serology – type 1 diabetes and A 103
- erectile dysfunction A 294
- insulin resistance syndrome 115, A 183, A 184, A 203
- obesity A 110
- childhood A 257
- vascular disease in diabetes S 3
- Epinephrine [*see* Adrenaline/
- Erectile dysfunction A 294, A 295
- endothelial function in – type 2 diabetes 1155
- sildenafil therapy in type 2 diabetes 1296
- Erythrocyte – membrane composition in gestational diabetes A 240
- membrane fluidity in diabetes A 320
- refractive index in diabetes A 320
- Estrogen [*see* Oestrogen/
- European Association for the Study of Diabetes [*see* EASD/
- European Foundation for Study of Diabetes – Albert Renold Award *EASD News Section 10/01 53*
- Euthanasia 1 r, 923 c
- Evidence-based medicine [*see* Diabetes – care; Education – diabetes/
- Exendin & analogues A 131, A 197, A 198
- Exercise – acute – insulin secretion, effect on A 19
- metabolic effects A 189
- skeletal muscle glucose uptake, effect on A 254
- skeletal muscle glycogen, effect on A 163
- training – cardiac rehabilitation A 69
- cardiovascular mortality, effect on 2134
- cardiovascular risk factors, effect on 2134
- diabetes prevalence and 1221
- diabetes, in A 254, A 255
- mortality in diabetes and A 113
- thrombomodulin, effect on in diabetes 693
- Eye – blood flow – glucose & insulin, effect of
- pulsatile – hyperglycaemia, effect of 700

- corneal epithelial basement membrane - type 2 diabetes 340
- lens - advanced glycation end-products A 34, A 46

## F

- Family study - diabetes - type 1 - coeliac disease 1051
  - - islet autoimmunity A 101
  - - thyroid autoimmunity A 152
  - - type 2 - arterial pulse-wave velocity A 323
  - - genome scan 501, A 37, A 38
  - - GIP-stimulated insulin secretion A 194, A 195
- diabetes - type 2 - offspring of two diabetic parents A 108
- obesity - chromosome 10 linkage 363
- Fas - islet B-cell cytotoxicity, role in A 142
- Fat - dietary *[see Diet - fat]*
- Fatty acid - binding protein 1268
- binding protein - cytosolic - skeletal muscle 2013
- $\gamma$ -linolenic acid -  $\alpha$ -lipoic acid diester 424
- mono-unsaturated - diet, enriched 2038
- insulin sensitivity, effect on 312
- non-esterified - apo-C1-overexpressing mouse, metabolism in 437
- hepatic glycogenolysis, effect on 48
- insulin secretion, effect on 1988, A 138
- insulin-secreting cell, effect on A 30, A 174
- islet B-cell, effect on *[see also B-cell, islet - lipotoxicity]* A 124
- liver metabolism, effect on - insulin and 784c
- metabolism A 164-A 165
- - rosiglitazone, effect of in type 2 diabetes 2210
- - skeletal muscle 2013
- - myocardial oxidation - IGT, in 184
- - oxidation - pioglitazone, effect of A 200
- serum -  $\beta$ -adrenoceptor polymorphisms and 629
- saturated - diabetes risk factor 805r
- insulin secretion, effect on 738
- vascular smooth muscle cell, effect on 614
- trans - diabetes risk factor 805r
- transporter - FAT/CD36 - skeletal muscle 444
- $\omega$ -3 - diabetic autonomic neuropathy, effect on A 300
- insulin sensitivity, effect on 312
- metabolic effects A 156
- $\omega$ -6 - insulin secretion, effect on A 123
- Ferritin - serum - coronary heart disease and A 314
- Fetal, Fetus - growth *[see Birth-weight - low; Malnutrition - early life]*

- insulin hypothesis 1197c
- macrosomia - diagnostic criteria for diabetes and A 246
- maternal diabetes, effect of A 242, A 244
- origins hypothesis *[see Birth-weight - low]*
- FGF *[see Growth - factor - fibroblast/*
- Fibrinolysis factors *[see also Plasminogen/ - insulin resistance and A 111*
- type 2 diabetes A 272
- Fibroblast - glucose transport A 43, A 44
- growth factor *[see Growth - factor - fibroblast/*
- Fibronectin - renal - streptozotocin-diabetic spontaneously hypertensive rat 2088
- Fluorescence correction microscopy - insulin binding, monitoring of 1184
- Folate - endothelial function, effect on A 323
- Foot, diabetic *[see also Amputation - lower-limb - diabetes/ A 3, A 4*
- Charcot A 277
- - bisphosphonate therapy 2032
- classification A 284
- clinical aspects A 24, A 25
- EASD Study Group (DFSG) *EASD News Section 4/01 19*
- economics of diabetes care and 2077
- education A 259
- epidemiology A 24, A 25, A 279-A 281, S 65
- natural history A 282
- pathogenesis A 277-A 279
- risk factors A 14
- treatment A 282-A 284
- ulcer - prevention - economics 2077
- Fusidate - BB rat diabetes incidence, effect on A 99

## G

- Gait - diabetic neuropathy, in 585
- Galactosylceramide A 151
- Gastric - emptying 1080r, A 291
- gene expression A 181
- Gastrin - islet growth, effect on A 117
- releasing peptide receptor - islet B-cell function and A 148
- Gender *[see Sex]*
- Gene - expression - cDNA microarray analysis A 53
- mitochondrial - mutation - type 1 diabetes 2187
- Genetics - diabetes - NOD mouse - Idd6 locus 1054
- - type 1 A 52, A 53, A 80-A 84
- - - MIC-A polymorphism 514c
- - - neurogenin 3 123
- - type 2 A 22, A 23, A 85-A 95
- - - adrenoceptor  $\beta_2$  &  $\beta_3$  polymorphisms 629
- - - AKT1 polymorphism 910
- - -  $\alpha$ 2-macroglobulin polymorphism 222
- - - amylin mutation 106c, 906
- - - ApoE polymorphism 222
- - - Ashkenazy Jews 910
- - - butyrylcholinesterase K polymorphism 2227
- - - Chinese Hans 501
- - - genome scan 501, A 37, A 38
- - - glucokinase polymorphism 1326
- - - hepatic nuclear factor polymorphism 1326
- - - IPF-1 1203r
- - - Japan 906
- - - Lamin A/C 779
- - - MODY A 64, A 65
- - - neurogenin 3 123, 241
- - - PDX-1 1203r
- - - PEK/EIF2AK3 mutation 786c
- - - PPAR $\gamma$  polymorphism 1170
- - - PPAR $\gamma$  proactivator-1 polymorphism 2220
- - - PTEN polymorphism 237
- - - sulphonylurea receptor promoter polymorphism 1330
- - - syntaxin A polymorphism 2092
- - - transient neonatal diabetes mellitus locus 924c
- - - twin studies in insulin resistance syndrome 537
- - - uncoupling protein polymorphisms 373, 946r, 1065c
- diabetic nephropathy A 76, A 77, A 261
- - HNF-1 $\beta$  polymorphism 127c
- - angiotensin converting enzyme polymorphism 520c
- - haptoglobin polymorphism 602, 2104c, 2237c
- - paraoxonase polymorphisms 104, 1062c
- - prollyl endopeptidase polymorphism A 268
- dyslipidaemia - PPAR $\gamma$  polymorphism 1354c
- heritability - twin study - insulin resistance syndrome 537
- IA-2 - phylogenetics 81
- impaired fasting glucose - paraoxonase-1 promoter polymorphism 1177
- insulin resistance - insulin receptor substrate-1 polymorphism 1200c
- insulin resistance syndrome -  $\beta_3$ -adrenoceptor polymorphism 115
- macrovascular complications of diabetes A 311
- mutation screening - denaturing HPLC 775
- obesity A 181
- - beacon gene A 54
- -  $\beta$ -adrenoceptor polymorphism A 185
- - chromosome 10 linkage study in human 363
- - IRS-1 polymorphism 367
- - melanocortin-4 mutation 1335
- - PPAR $\gamma$ 2 polymorphism 925c
- - uncoupling protein polymorphisms 946r

## Genistein

- Genistein – islet B-cell apoptosis, effect on A 143
- Ghrelin */see* Growth – hormone – releasing hormone/
- GIP A 18, A 19, A 194–A 198
  - analogue A 194, A 195
  - glycated A 319
  - islet B-cell, effect on A 130
- Gliclazide */see* Sulphonylurea – gliclazide/
- Glomerular – filtration rate – blood pressure and – type 1 diabetes 865
  - – insulin & glucose, effect of 95
  - matrix production A 310
  - morphometry – blood pressure and – type 1 diabetes 865
  - – low birth-weight, effect of in rat 721
- GLP-1 (glucagon-like peptide 1) and analogues A 192, A 193, A 196–A 198
  - antagonist */see* Exendin/
  - islet B-cell, effect on A 121, A 122, A 130
  - therapy – human A 237
- Glucagon – hypoglycaemia, response to A 219
  - mini- A 191
  - paracrine effect in intact pancreas A 131
  - plasma – diurnal variation A 191
  - receptor – antagonist – Bay 27–9955 2018
  - – antagonist – NNC25–2504 A 196
  - – knockout mouse A 194
  - secretion A 131
  - – glucose, inhibition by A 127
  - – impaired glucose tolerance, in 1998
- Glucocorticoid – cortisol, plasma – oral glucose tolerance test, effect of A 224
  - diabetes induction A 110
  - metabolic effects A 170, A 171
- Glucokinase – diabetic rat, activity in – tungstate, effect of 507
  - hepatic A 173, A 174
  - insulin sensitivity and A 164
  - islet B-cell adaptation, role in 1026
  - islet B-cell expression A 120, A 121
  - mutation screening 775, 898
  - polymorphism – type 2 diabetes – Italy 1326
- Glucosamine – endothelial cell, synthesis in 196
  - islet B-cell function, effect on A 141
  - vascular reactivity, effect on 196
- Glucose – 6 phosphatase – regulation A 172, A 173
  - blood – mean – diabetic retinopathy progression, relationship to 1215
  - – monitoring A 228, A 229
  - – – continuous A 218, A 238, A 239
  - dependent insulinotropic hormone */see* GIP/
  - fasting – impaired – paraoxonase-1 promoter polymorphism 1177
  - haemodynamic effects in human 95
  - high – vascular smooth muscle cell, effect on A 21, A 22
  - metabolism A 205, A 206
  - – fasting – type 2 diabetes 983
  - – hepatic – tungstate, effect of in diabetic rat 507
  - – rosiglitazone, effect of – type 2 diabetes 2210
  - production – 5-aminoimidazole-4-carboxy-amide-1- $\beta$ -D-ribofuranoside, effect of 2180
  - – fasting – type 1 diabetes A 173
  - – – type 2 diabetes 983
  - – glucagon receptor antagonist, effect of in human 2018
  - – hepatic – lipids, control by in human 48
  - sensor A 45, A 46
  - – continuous – stress affecting results 268c
  - – viscometric affinity 416
  - signalling A 19–A 20
  - tissue monitoring – microdialysis 416
  - – viscometric affinity sensor 416
  - tolerance – impaired – diurnal blood pressure pattern A 272
  - – – epidemiology 1094, A 106–A 113
  - – – glucagon secretion in 1998
  - – – insulin secretion 929r
  - – – myocardial fatty-acid oxidation in 184
  - – – pathophysiology A 204
  - – – rosiglitazone, effect of A 200, A 221
  - – – type 2 diabetes, relationship to A 109
  - – low birth-weight, following – twin study 33
  - – test – insulin dynamics assessment by 783c
  - – – IV – insulin secretion model – ISEC 1339
  - – – oral A 230
  - – – – glucagon response 1998
  - – – – pregnancy 972
  - – – tracer – [ $^{18}$ F]DG – PET 2171
  - – 2-deoxy-2-fluoroglucose 393r
  - – D-mannoheptulose 393r
  - – islet B-cell imaging 393r
  - transport A 43, A 44
  - – GLP-1, effect of in myocyte A 197, A 198
  - trophoblast proliferation, effect on 209
  - turnover – fasting – type 2 diabetes 983
  - uptake A 172–A 174
  - – skeletal muscle – RXR agonist, effect of 444
  - – splanchnic, postprandial – type 1 diabetes, effect of 729
- GLUT A 43, A 44
  - 1 – expression – retina 791r
  - – glomerular A 77
  - 2 – islet B-cell 1071r
  - 4 – expression – oxidative stress, effect of 2156
  - 5 (fructose transporter) – adipocyte A 157
- Glutamic acid – decarboxylase – T-cell recognition – HLA restriction 70
- Glutamine:fructose-6-phosphate amidotransferase – endothelial cell 196
- Glycaemic control – ageing and A 230
  - albuminuria and S 37
  - cardiovascular risk factor in diabetes S 54
  - complications of diabetes, effect on – type 2 diabetes 1118
  - continuous blood glucose monitoring A 238, A 239
  - diabetes – type 1 – residual islet B-cell function and 1349r
  - diabetic neuropathy and A 14, A 299
  - diabetic pregnancy, in A 245
  - diabetic retinopathy and S 22
  - diabetic retinopathy and 156, 2203
  - endothelial function 518c
  - epidemiology A 114, A 115
  - glucose oxidation, effect on in type 2 diabetes A 190
  - hospital in-patients A 228
  - inflammatory markers, effect on in type 2 diabetes A 316
  - lifetime cumulative glycaemic exposure – retinopathy incidence A 50
  - measurement – lens glycation by optical method A 46
  - – mean blood glucose – retinopathy progression and 1215
  - monitoring A 228, A 229
  - postprandial hyperglycaemia, importance of 2107r
  - stress, effect of 268c
  - weight regulation and – utility function A 234
- Glycaemic index */see* Diet – carbohydrate/
- Glycation – advanced end-product 129r, 674r, A 33, A 34, A 318, A 319
  - – detoxification – troglitazone, effect of 2004
  - – diabetic nephropathy, role in 1957r
  - – diabetic neuropathy and 1973r
  - – diabetic retinopathy, role in A 39
  - – endothelial cell, effect on 1310
  - – inhibitor – ALT-946 108
  - – – pyridoxamine A 290
  - – – retinal protection A 290
  - – matrix metalloproteinases, effect on 433
  - – N<sup>ε</sup>-(carboxymethyl)lysine 488
  - – renal epithelial cell, effect on 488
  - – teratogenicity A 12
- Glycerophosphatase – mitochondrial – mutations A 122
- Glycogen A 161–A 163
  - islet B-cell 393r
  - phosphorylase – skeletal muscle 1238, A 164
  - synthase – kinase – inhibitor A 178
  - – promoter – skeletal muscle A 93
  - – skeletal muscle – type 2 diabetes, in A 78
  - synthesis – hepatic, postprandial – type 1 diabetes, effect of 729



- - insulin-induced - SH2-containing inositol phosphatase, role of 1259
  - Glycogenolysis - hepatic - lipids, control by in human 48
  - Glycosaminoglycan - urinary - diabetic nephropathy, in A 269
  - Glyoxalase - troglitazone, effect of 2004
  - Golgi Lecture 2000 - pathogenesis of diabetic vascular disease 674r
  - G-protein -  $\beta$ 3-subunit polymorphism - diabetic macrovascular disease and A 311
  - Growth - childhood - type 2 diabetes risk and A 8
  - factor - epidermal - knockout mouse - MAPK pathways A 118
  - - fibroblast - 4 - blastocyst, expression by - glucose, effect of 1318
  - - - receptor - islet B-cell 1071r
  - - hepatocyte - islet B-cell differentiation and A 119
  - - hyperglycaemia, effect of 674r
  - - nerve - islet B-cell, effect on 1281
  - - - pro-oxidant-treated diabetic rat 424
  - - - signalling 1281
  - - platelet-derived -  $\beta$ -receptor - vascular smooth muscle 480
  - - transforming  $\beta$  - diabetic nephropathy, role in 1957r
  - - - glomerular endothelial cell, effect on A 265
  - - - mesangial cell A 77
  - - - receptor - glomerular expression 495
  - - - retina, in A 289, A 290
  - - - smoking and A 310
  - - - urinary A 263
  - - vascular endothelial - diabetic nephropathy, role in 1957r
  - - - hypertension and diabetes, in A 306
  - - - *ob/ob* mouse, expression in 471
  - - - retina - diabetic 883, 1102, A 289
  - - hormone A 168, A 169
  - - islet B-cell, effect on - human fetal A 132
  - - releasing hormone - body weight and A 167
  - - - insulin secretion, effect on A 135, A 193
  - trophoblast - glucose, effect of 209
  - GTP - islet B-cell mitochondria, generation in 89
  - GTPase - Rac - insulin exocytosis, role in A 62
  - Guanidine - nucleotide binding protein - polymorphism - diabetic nephropathy and A 262
- H**
- Haematology - insulin resistance syndrome 1232
  - Haemochromatosis, hereditary - diabetes in A 110
  - diabetic nephropathy and A 76
  - Haemorrhology - cardiovascular risk factor A 314
  - Haemostasis - factors - insulin resistance and A 111
  - Haptoglobin polymorphism - diabetic nephropathy and 602, 2104c, 2237c
  - Healing, wound - D-polyglucose, effect of in diabetic mouse A 3
  - leptin, effect of 471
  - Heart - coronary disease - angioplasty - restenosis A 57
  - - diabetes A 46, A 47
  - - - epidemiology S 54
  - - insulin resistance and A 57
  - - insulin, effect of A 57, A 58
  - - pattern - diabetes A 303, A 304
  - - revascularisation - early restenosis A 314
  - - screening - ECG interpretation S 72
  - - silent 259r, A 304
  - - thiazolidinediones, effect of A 199
  - coronary haemodynamics - glibenclamide, effect of A 216
  - coronary perfusion pressure - high glucose, effect of 464
  - diabetes A 303-A 306
  - ECG - Minnesota code S 72
  - QT interval 464, A 293
  - failure - insulin resistance in A 187
  - insulin signalling A 157
  - ischaemia - reperfusion injury - protection 2165, A 28
  - isolated - rat - high glucose, effect of 464
  - $K^+$  ATP channel - gliclazide, effect of 1019
  - repaglinide, effect of 747
  - left ventricular function - diabetes A 47
  - - diabetic autonomic neuropathy and A 292
  - - hypoglycaemic treatment and A 303
  - left ventricular hypertrophy - normotensive type 2 diabetes, in A 305
  - left ventricular mass - insulin resistance and A 183
  - muscle -  $Ca^{2+}$  current - L-type - insulin, effect of 269c
  - - fatty-acid oxidation - impaired glucose tolerance, in 184
  - myocardial advanced glycation end-products - diabetes A 319
  - myocardial blood flow - diabetes A 291
  - myocardial function - diabetes, in A 68, A 69
  - myocardial infarction - glycaemia and A 303, A 304
  - - insulin infusion 2165, A 68
  - - reperfusion injury 2165, A 28
  - - secondary prophylaxis in diabetes A 303
  - - sulphonylurea therapy and A 68, A 69
  - rate - type 1 diabetes in adolescence and 865
  - Hemidesmus indicus* - hypoglycaemic action A 228
  - Hepatic, Liver - cirrhosis - insulin resistance A 190
  - gluconeogenesis - control - non-esterified fatty acids, role of
  - glucose metabolism A 172-A 174
  - glycogen A 161-A 163
  - glycogen synthesis, postprandial - type 1 diabetes, effect of 729
  - steatosis - insulin resistance and A 175
  - - rosiglitazone, effect of A 200
  - transaminase, serum - pioglitazone and A 220
  - UDP-glucose flux 729
  - Hepatitis - autoimmune - insulin response to glucose load, effect on A 150
  - C - diabetes in A 187
  - Hepatocyte - fetal - IGF binding protein production A 161
  - nuclear factor - 1 - polymorphism - MODY - IPF1 mutation and 249
  - - 1 $\alpha$  - polymorphism - type 2 diabetes 1326, 2098, A 89
  - - 1 $\beta$  - mutation - clinical associations 387c
  - - polymorphism - diabetic nephropathy 127c
  - - 3 $\beta$  - islet A-cell differentiation, role in A 71
  - - 4 $\alpha$  - polymorphism - type 2 diabetes - Italy 1326
  - - MODY, mutations in A 64, A 65
  - - mutation screening - denaturing HPLC 775
  - Herbal medicine - hypoglycaemic effects A 227, A 228, A 236
  - Hexokinase II - promoter A 93
  - skeletal muscle glucose uptake and A 177
  - Hexosamine pathway - complications of diabetes and 674r
  - insulin resistance and A 176
  - High-performance liquid chromatography - MODY diagnosis, role in 775
  - HLA - DQ - coeliac disease in type 1 diabetes families and 1051
  - - prediction of Type 1 diabetes 290
  - - type 1 diabetes susceptibility - islet autoimmunity and 63
  - DR53 - GAD peptide recognition by T-cells, effect on 70
  - type 1 diabetes and A 52, A 81, A 82
  - Homocysteine - plasma - complications of diabetes and A 308, A 309
  - - diabetic retinopathy and A 290
  - - pregnancy, in - glucose tolerance and A 241
  - platelet nitric oxide production, effect on 979

## HPLC

HPLC */see* High-performance liquid chromatography/

Hyaluran – autologous graft for diabetic foot ulcer A25

Hyperglycaemia */see also* Glucose – high/

– fasting – pathogenesis in type 2 diabetes 983

– ocular blood flow, effect on 700

– postprandial – cardiovascular risk factor 2107r

– – mortality and A114

– – nateglinide, effect of A215

– – platelet protein kinase C, effect on 188

– – screening A8

– – splanchnic glucose uptake, role of – type 1 diabetes 729

– vascular effects 674r

Hyperinsulinaemia – adipocyte, effect on A180

– cardiovascular risk factor A8

– congenital A139

– erythrocyte sodium transport, effect on A188

– leptin resistance induced by 1125

– skeletal muscle, effect on A179

– vasodilator effects – eye & kidney 95

Hyperlipidaemia */see also* Dyslipidaemia, Lipoprotein, Apolipoprotein/

– apolipoprotein-C1-overexpressing mouse 437

Hyperosmolar non-ketotic coma – diabetic – sepsis in 1011

Hypertension A272–A274

– diabetes diagnostic criteria and 26

– diabetes, in – epidemiology S3

– diabetic nephropathy and 1957r, 2088, A35, A275–A276, S37

– diabetic retinopathy, role in 156, A287, S22

– insulin resistance syndrome in A111

– systolic – end-stage renal failure risk factor in type 1 diabetes S46

Hypertriglyceridaemia – cardiovascular risk factor in diabetes S54

– diabetes and A300

– diabetic nephropathy risk factor A267

– diabetic neuropathy and A298

– end-stage renal failure risk factor in type 2 diabetes S46

Hypoglycaemia A217–A219

– clinical aspects A66, A67

– factitious 784c

– Leydig-cell-tumour-associated A61

– neonatal A242, A243

– recurrent – stroke outcome, effect on A57

– type 1 diabetes, in – insulin analogue therapy, effect of A207–A210

– – residual islet B-cell function and 1349r

– unawareness – diabetic autonomic neuropathy and A291

Hypoglycaemic agent – 5-aminoimidazole-4-carboxy-amide-1- $\beta$ -D-ribofuranoside 2180

– experimental A225–A228

– GLP-1 analogues A196–A198

– glucagon receptor antagonist – Bay 2709955 2018

– herbal A227, A228, A236

– human studies A236–A237

– hydroxyisoleucine A79

– imidazoline */see* Imidazoline/

– oral A36, A37

– – combination therapy in type 2 diabetes A233–A235

– – metformin */see* Metformin/

– – Ramadan A60

– – repaglinide */see* Repaglinide/

– – secondary failure A229

– tungstate – streptozotocin-diabetic rat 507

Hypogonadism – diabetes, in A170

Hypothalamus – intracellular glucose signalling – bioluminescence imaging A169

## I

IA-2 */see* Tyrosine – phosphatase – IA-2/

IA-2 $\beta$  */see* Phogrin/ 81

IAPP (Islet amyloid polypeptide) */see* Amylin/

Id protein – islet B-cell, expression in 453

Iduronate-2-sulfatase – islet A141

IGF-1 – diabetic retinopathy and A289

– 1 – expression – mesangial cell A264

– 1 – skeletal muscle, effect on – insulin resistance A179

– 2 – polymorphism – metabolic effects of overfeeding and 2231

– binding protein – 1- serum – glucose tolerance and 333

– 3 – hypoglycaemic effect in human A237

– – fetal – maternal low-protein diet, effect of A161

– – insulin-secreting cell, expression in A119

– – osteopenia in diabetes and A223

– – polymorphism – metabolic effects of overfeeding and 2231

Imidazoline – insulin secretion, effect on A134, A135

Immune response – diabetic foot and A278

Immunology – type 1 diabetes A149–A151

Incretin hormones */see also* GIP; GLP/ A18, A19, A191–A198

Infant feeding – cows' milk – specific immune response and type 1 diabetes 1140

– insulin in milk A214

– type 1 diabetes risk 63, A84, A101, A102

Inflammatory markers */see also* C-reactive protein/

– insulin resistance syndrome and A178

– diabetic macrovascular disease and A315

– rosiglitazone, effect of A36

Information technology – diabetes care A58, A59

– diabetes education A251

– diabetes register A247

Infra-red spectroscopy – glucose sensor A45

Inhibin A247

Inositol phosphatase – SH2-containing – insulin signalling, effect on 1259

Instructions to authors – full *Advertisement pages, Jan & July issues*

Insulin – analogue – fast-acting A15, A16, A209, A210

– – aspart – childhood, use in A257

– – – signalling A161

– – – lispro – albumin excretion rate, effect on A270

– – – pregnancy, use in A245

– – – type 2 diabetes, use in 929r

– – – long-acting A15, A207, A208

– – – glargine – diabetic retinopathy and A287

– – – – signalling A160, A161

– – – – elimination kinetics A137, A158

– – – endocytosis – endothelial cell 605

– – – gene – diabetes – early adulthood 40

– – – regulation A51, A52

– – – Id proteins 453

– – – PDX-1 1203r

– – – VNTR polymorphism – abdominal obesity and A87

– – – – maternal imprinting A88

– – – – glycated A318

– – – haemodynamic effects in human 95

– – – infusion – closed-loop A45, A58

– – – intraperitoneal A45

– – – iv – myocardial infarction, following 2165

– – – sc A26

– – – inhaled 305, A4, A5, A211–A213

– – – like growth factor */see* IGF/

– – – mutant – Wakayama A88

– – – oral A4, A151, A213, A214

– – – promoter factor – 1 – mutation – MODY4 249

– – – pulmonary delivery */see* Insulin – inhaled/

– – – pump */see* Insulin – infusion – sc/

(Insulin) – receptor – binding – fluorescence correction microscopy 1184

– – – C-peptide, effect of in L6 myoblasts/myotubes 1247

– – – imaging – PET A206

– – – internalisation A157

– – – signalling A43, A44, A78, A79, A156–A161

– – – – ceramide, effect of 173

– – – – glucocorticoid, effect of A171

– – – – insulin resistance, in A176, A177

- - - islet B-cell, in A 130
- - - neurotrophic factor, effect of 555
- - - rosiglitazone, effect of 544
- - - SH2-containing inositol phosphatase, effect of 1259
- - - substrate 1 173
- - - adipocyte, role in A 78
- - - expression - insulin resistance syndrome and A 113
- - - polymorphism - obesity 367
- - - polycystic ovary syndrome and 1200c
- - - type 2 diabetes and A 22, A 23
- - - structure-function study 992
- - - substrate 2 - hepatic leptin signalling, role in A 64
- - - polymorphism - islet B-cell function and A 132
- - - substrate 3 - insulin signalling, role in 992
- (Insulin) - resistance A 183-A 188
- - adipocyte - GLUT4 expression 2156
- - adipose tissue glucose uptake in vivo 2171
- - biochemistry A 48, A 49, A 174-A 180
- - diabetic nephropathy risk A 268
- - diabetic retinopathy and A 286
- - experimental hypoglycaemic agents, effect of A 225-A 228
- - fatty-acid induced - human myocyte A 79
- - hepatic A 175
- - HOMA 367
- - IGFBP-1 and 333
- - IRS-1 polymorphism 367
- - islet A-cell 1998
- - measurement A 55, A 56, A 203, A 204
- - neurotrophin, effect of in *db/db* mouse 555
- - obesity, in A 180, A 183
- - oxidative stress preceding 706
- - plasminogen activator inhibitor expression by fibroblasts A 309
- - PPAR $\gamma$  polymorphism and 1170
- - pregnancy A 28, A 29
- - protein kinase C, role of 659r
- - saturated fat, effect of 312
- - severe - rosiglitazone ineffective A 200
- - skeletal muscle A 174-A 176
- - - lipid & glycogen morphometry 824
- - syndrome - aetiology - genetic vs environmental factors 537
- - - apolipoprotein-C1-overexpressing mouse 437
- - -  $\beta_2$ -adrenoceptor polymorphism 115
- - - complications of diabetes, effect on 1148
- - - epidemiology A 110-A 112
- - - genetics A 85-A 87
- - - gestational diabetes, following A 246
- - - haematology 1232
- - - physical training, effect of 2134
- - - thiazolidinediones, effects of A 27, A 28, A 199-A 202, A 220-A 222
- - - type 2 diabetes, in - euglycaemia, effect of A 190
- (Insulin) - sc - immunogenicity A 154
- - lipohypertrophy A 224
- - secreting cell [see also B-cell, islet] - gene expression A 30, A 31
- - lipotoxicity, effect of A 174
- - mitochondria - succinyl-CoA synthetase isoforms 89
- - stem-cell-derived 407r
- - secretion [see also B-cell, islet; Incretin; Insulin - secreting cell] A 133-A 139
- - arginine-stimulated - non-esterified fatty acids, effect of 1988
- -  $\text{Ca}^{2+}$  signalling A 124
- - cephalic phase A 192
- - exocytosis A 51, A 61, A 62, A 133-A 135
- - first-phase 929r
- - glucokinase mutations and 898
- - impaired glucose tolerance 929r
- - measurement 1339, A 55, A 56
- - microencapsulated islet transplants 646
- - pancreatic duct lumen 575
- - pulsatility A 138
- - saturated fatty acid, effect of 738
- - signalling A 20
- - transgenic myoblast, tetracycline-regulated A 136
- - type 2 diabetes, in 929r, A 19
- - sensitivity A 189-A 191
- - glucokinase mutations and 898
- - indices A 186
- - measurement 783c, A 55, A 56
- - neurotrophic factor, effect of 555
- - PPAR $\gamma$  polymorphism and 1170
- - pregnancy A 240
- - rosiglitazone, effect of in type 2 diabetes 2210
- - seasonal variation A 116
- - signalling [see Insulin - receptor - signalling] A 25, A 26
- - intensive A 16
- - oxidative stress, effect on A 155
- Insulinoma, factitious hypoglycaemia more common than 784c
- Insulinitis - MFP14, immunomodulation by in NOD mouse 839
- Interferon -  $\gamma$  - islet B-cell cytotoxicity, role in 567, 2115r
- - signalling - islet B-cell 567
- - type 1 diabetes, in - interleukin-18, effect of 309
- - regulatory factor-1 567
- Interleukin -  $\text{I}\beta$  - islet, effect on 325, A 144, 2115r
- 4 - promoter polymorphism and type 1 diabetes A 80
- 6 - sepsis marker in decompensated diabetes 1011
- 6 - impaired glucose tolerance and A 115
- 12 - polymorphism - type 1 diabetes and A 53, A 83
- 18 - serum - prediabetes type 1 309
- Intestine - glucose metabolism A 172, A 173
- permeability - glycaemic control, effect on in type 1 diabetes A 293
- Inuit - insulin resistance syndrome A 112
- IPF-1 [see Transcription - factor - pancreatic duodenal homeobox-1/]
- Islet, pancreatic - amyloid polypeptide [see Amylin]
- cell - pig - endogenous retrovirus 2044
- culture - nerve growth factor 1281
- differentiation 1203r, 2066
- exocrine pancreas, interaction with 575
- human - imaging 393r
- isolated - insulin-secreting cell assessment A 122
- mouse - insulin secretion - saturated fatty acid, effect of 738
- physiology *EASD News Section 10/01* 45
- Isogomine - glycogen phosphorylase inhibitor A 162
- Isoprostane F2 706, 766

## K

- $\text{K}^+$  channel - inward rectifier 6.2 - gliclazide, effect of 1019
- - repaglinide, effect of 747
- $\text{K}^+_{\text{ATP}}$  channel - A-cell A 124
- gliclazide, effect of - tissue specificity 1019
- MgADP, modulation by 747, 1019
- nateglinide, effect of A 214
- nicorandil/sulphonylurea interaction A 68
- nuclear membrane localisation in islets A 20
- repaglinide, effect of - tissue specificity 747
- Keratinocyte lipid binding protein 1268
- Ketoacidosis, diabetic - blood glucose monitoring A 228
- sepsis in 1011
- Ketoalkalosis, diabetic A 60
- Ketone - blood - monitoring A 228
- Kidney [see Renal/]
- Kinase - eukaryotic translation initiation factor 2- $\alpha$  (EIF2AK) - mutation 786c
- Janus - leptin signalling, role in 1125
- phosphatidylinositol-3' 173
- - Akt - downstream regulation in L6 myotube 1259
- protein - B - activation - ceramide, effect of 173
- - B/Akt - pancreatic duct regeneration, activation in 2056

## Kinase

- Kinase – protein
  - C 657r, 659r
  - complications of diabetes and 674r
  - $\delta$  – islet B-cell lipotoxicity, role in A 143
  - diabetic nephropathy, role in A 264, A 265
  - diabetic neuropathy and 1973r
  - hyperglycaemia, effect of – platelets 188
  - inhibitor – calphostin C – insulin secretion, effect on 738
  - insulin secretion, role in 738
  - insulin signalling, role in A 156, A 157
  - islet B-cell, role in A 125
  - isoenzymes 659r
  - isoforms – diabetic nephropathy, role in 1957r
  - *fa/fa* rat A 176
  - retina, in A 289
  - $\Theta$  – insulin resistance and A 48
  - vascular smooth muscle – glucose, effect of 480
  - saturated NEFA, effect of 614
  - $\text{Ca}^{2+}$ /calmodulin dependent  $\text{II}\beta 3$  – human genome, in 787c
  - islet B-cell A 124, A 130
  - polymorphism – type 2 diabetes A 88
  - Jun N-terminal – inhibitor A 41
  - mitogen-activated – islet B-cell differentiation, role in A 71
  - vascular smooth muscle – saturated NEFA, effect of 614
  - serine/threonine AKT1 polymorphism and type 2 diabetes 910
- Kobberling-Dunnigan syndrome A 225

## L

- Lamin A/C – polymorphism – type 2 diabetes 779
- Laminin – serum – diabetic neuropathy A 299
- Leptin A 63, A 64
  - gestational diabetes and A 240
  - human, in A 166–A 168
  - islet B-cell, effect on A 126, A 128
  - plasma – cardiovascular risk factor A 315
  - gestational diabetes, in 164
  - receptor – polymorphism – hyperinsulinaemia and A 23
  - signalling – insulin, effect of 1125
  - serum – prior gestational diabetes and A 246
  - wound healing, effect on 471
- Leucocyte – adhesion – coronary reperfusion injury, in 2165
  - retina A 288
  - polymorphonuclear – function in diabetes A 151, A 309
- Leucocytosis – type 2 diabetes development and A 116, A 117
- Lifestyle – diabetes – intervention A 230, A 231
- Lipase, hormone-sensitive – insulin vs TNF- $\alpha$  effects 55
  - islet B-cell A 6
  - polymorphism – type 2 diabetes A 93
- Lipid – binding protein /see Fatty acid – binding protein/
  - lowering agent – antioxidant effects A 321
  - atorvastatin A 222
  - cerivastatin – nerve, effect on in streptozotocin-diabetic rat A 296
  - diabetes A 301, A 302
  - fenofibrate A 163, A 165
  - probucol A 320
  - rosuvastatin A 165, A 297
  - statins – diabetic nephropathy, effect on A 264, A 265
  - thiazolidinedione combination therapy A 221, A 222
  - vascular reactivity, effect on in diabetes A 323
  - peroxidation – marker – nitrotyrosine 834
- Lipodystrophy – familial partial (Kobberling-Dunnigan syndrome) A 225
- Lipoic acid /see Antioxidant –  $\alpha$ -lipoic acid/
- Lipolysis – insulin, effect of – long-term regulation 55
- Lipoprotein – LDL – diabetic nephropathy, effect of A 156
  - type 2 diabetes A 300, A 302
  - metabolism A 164–A 166
  - oxidation – diabetes A 321, A 322
- Lithospermate B – renoprotection A 265
- Liver /see Hepatic/
- Lymphocyte /see also Thymocyte/
  - T – ART2.2 expression – NOD mouse 848
  - cytotoxic – associated protein 4 – polymorphism A 80
  - GAD-specific, HLA-D53-restricted 70
  - type 1 diabetes, in A 149, A 150
- Lysosomal enzymes, serum –  $\alpha$ -lipoic acid, effect of in diabetes A 320
  - diabetic nephropathy, in A 269
  - sulphatase activity 230
- Lysosome – renal – renoprotective agents, effect of in diabetic rat 230

## M

- Macaca mulatta* – obesity, pancreatic effects of A 149
- Macromolecular protein complex – oxidative stress marker 1356c
- Macrovascular disease – diabetes, in A 303–A 323
  - economics A 252, A 253
  - epidemiology S 3
- polyol pathway, role of 480
- progression 203
- diabetic nephropathy, in A 270
- genetics A 311
- protein kinase C and 659r
- thiazolidinediones, effect of A 199
- Magnetic resonance – imaging – hypoglycaemia effect on brain A 217
- spectroscopy – brain metabolism A 299
- cerebral metabolism – rat 346
- hepatic glycogen metabolism 48
- insulin-secreting cell metabolism A 124
- intramyocellular lipid A 179, A 185
- skeletal muscle glycogen synthesis A 189
- Malaria – type 1 diabetes incidence in Sardinia and A 82
- Malnutrition in early life /see also Birth-weight, low/
  - islet B-cell, effect on – proteome analysis A 121
- Meal tolerance test A 137, A 229
- ocular blood flow, effect on in type 2 diabetes 700
- Meglitinide /see Repaglinide; cf also Nateglinide/
- Melanocortin – 4 – mutation – abdominal obesity and 1335
- Melanocyte stimulating hormone – glucose transport, effect on A 169
- Melatonin – mesangial cell, effect on A 264
  - receptor – islet B-cell, expression by A 132
- Menopause A 223
- Menstrual disorder – diabetes A 223
- Metabolic syndrome /see Insulin – resistance – syndrome/
- Metal – transition – diabetic neuropathy, role in 621
- Metalloproteinase, matrix – chronic wound, expression in A 3, A 4
- glycation cross-links, effect of 433
- Metformin – insulin resistance, effect on A 178
  - islet B-cell lipotoxicity, protection against A 140
  - mortality in diabetes, effect on A 112
  - polycystic ovarian syndrome, effect in A 187
  - therapy – economics of diabetes care and 298
  - repaglinide combination A 235
  - orlistat combination A 231
  - sulphonylurea combination A 234, A 235
  - triple combination A 235
- MFP14 /see Protein – multifunctional – 14kDa/
- MHC – Class 1 – chain-related-A gene (MICA) polymorphism and type 1 diabetes 514c
- Microalbuminuria – diabetes – epidemiology S 37
  - diabetic pregnancy A 246
  - endothelial function and – diabetes – type 1 593



- measurement A 268
- paraoxonase polymorphisms 104
- progression A 269, A 270
- - haptoglobin polymorphism and 602, 2104c, 2237c
- screening - type 1 diabetes A 262
- tubular dysfunction markers preceding 224
- Microangiopathy [see also Retinopathy; Nephropathy; Endothelial; Vascular/
- diabetic - advanced glycation end-products, role of 129r
- - protein kinase C and 659r
- nerve 1973r
- Microbiology of the diabetic foot A 278
- Microdialysis - adipose tissue glucose uptake measurement, in 2171
- Microscopy, confocal - corneal epithelial basement membrane 340,
- insulin granule movements A 133
- Miglitol - hypoglycaemic effect A 236
- Minipig - streptozotocin-nicotinamide-diabetic A 149
- Minkowski Prize 2001 *EASD News Section 10/01* 41
- Minnesota code S 72
- Mitochondrion, Mitochondrial - glycerophosphatase mutations A 122
- insulin-secreting cell - succinyl-CoA synthetase isoforms 89
- metabolism simulation A 123
- depletion syndrome and diabetes A 257
- MMP [see Metalloproteinase - matrix/
- Model - diabetes epidemiology simulation A 114
- glucose kinetics A 55, A 56
- homeostasis assessment (HOMA), 783c, A 55, A 56, A 203, A 204
- - MODY2 children 898
- insulin elimination kinetics A 137
- insulin secretion (ISEC) 1339
- insulin sensitivity A 186
- Markov - economics of diabetes care - foot ulcers 2077
- mitochondrial metabolism A 123
- MODY (Maturity-onset diabetes in youth)
- 2 - pregnancy 516c
- 4 - gene - MODY3 mutations and 249
- - IPF-1 and 1203r
- genetics A 64, A 65
- mutation screening - denaturing HPLC 775
- - Iceland 2098
- - Italy 1326
- - Italy 898
- - NeuroD1 2098
- neurogenin 3 polymorphism 123
- Monocyte - chemoattractant protein-1 - endothelial cell expression A 318
- - islet expression in insulinitis and 325
- chemotactic cytokine receptor promoter polymorphism A 261
- receptor - polymorphism - insulin sensitivity and A 23
- Monosaccharide - ester - islet B-cell tracer 393r
- Mortalin - polymorphism - type 1 diabetes A 80
- Mortality - cardiovascular - risk factors in diabetes S 54
- - physical training, effect of 2134
- diabetes S 14, A 112-A 114
- - albumin excretion rate and A 316
- - amputations and A 281
- - angiotensin converting enzyme polymorphism A 35
- - body mass index and A 232
- - cardiovascular - socio-economic state and A 253
- - inflammatory markers and A 316
- - lower-limb amputation and S 65
- - renal function and A 262
- diabetic nephropathy A 270
- physical exercise and A 113
- Mouse - apolipoprotein-C1-overexpressing 437
- brown adipose tissue insulin-receptor-knockout A 6
- CD26 knockout - GLP-1 and GIP A 18
- *db/db* - insulin signalling - neurotrophic factor, effect of 555
- - islet B-cell exhaustion A 147
- EGF knockout A 118
- gastrin-releasing-peptide-receptor knockout - islet B-cell function A 148
- glucagon-receptor knockout A 194
- interferon-regulatory-factor-1 knockout - streptozotocin diabetes, effect on 567
- KKA<sup>y</sup>-CETP - glucose & lipid metabolism 2180
- NOD - diabetes - MFP14, protection by 839
- - - thymocyte proliferation impaired 1054
- - islet B-cell self-tolerance, restoration of 521r
- - monocyte chemoattractant protein-1 expression, islet 325
- - T-cell - ART2.2 expression 848
- *ob/ob* - insulin secretion A 147
- - wound healing, impaired - leptin, effect of 471
- transgenic - apolipoprotein-C1 437
- - calmodulin-overexpressing - islet B-cell apoptosis A 145
- - PKC- $\theta$  negative A 48
- UCP knockout 946r
- Multi-drug-resistant P-glycoprotein - islet B-cell A 134
- Munchausen's syndrome - factitious hypoglycaemia in 784c
- Muscle - cardiac - K<sup>+</sup><sub>ATP</sub> channel - gliclazide, effect of 1019
- - repaglinide, effect of 747
- skeletal - acetylcholinesterase - streptozotocin-diabetic rat 220
- - calpain 10 expression - lipid infusion, effect of A 37
- cell - L6 myoblast/myotube - C-peptide, effect of 1247
- - - SH2-containing inositol phosphatase, role of 1259
- - fatty acid binding protein - very low calorie diet, effect of 2013
- - fibre types in type 2 diabetes A 175
- - GLP-1, effect of A 18, A 197
- - GLUT10 A 43
- - glycogen A 161-A 163
- - - morphometry 824
- - glycogen phosphorylase in localisation - diabetic rat 1238
- - insulin resistance A 48, A 49, A 174-A 176
- - insulin signalling - ceramide, effect of 173
- - intramyocellular lipid A 7, A 27, A 79
- - - insulin resistance syndrome and A 185
- - - magnetic resonance spectroscopy A 179
- - - morphometry 824
- - - type 2 diabetes 824
- - L6 myocyte - ceramide, effect of 173
- - reoxygenation rate A 166
- - retinoid X receptor agonist, effect of with troglitazone 444
- - rosiglitazone, effect of A 27, A 28
- - sarcoplasmic reticulum-glycogenolytic complex - diabetic rat 1238
- - troglitazone, effect of A 202
- - smooth - cell - culture - collagen lattice 433
- - hyperproliferation, glucose-induced 480
- - vascular - cell biology A 21, A 22
- - - cell culture - glucose depletion of medium by 1067c
- - - growth-factor signalling A 310
- - - matrix metalloproteinases 433
- - - PAI-1 expression regulation 713
- - - proliferation - cilostazol, effect of 1034
- - - saturated non-esterified fatty acids, effect of 614
- Mutagenesis - N-ethyl-N-nitrosourea - diabetic mouse A 54
- Myotube [see Muscle - skeletal - cell/

## N

- N-acetyl transferase polymorphism and type 1 diabetes A 83
- N-acetyl- $\beta$ -glucosaminidase, urinary - glycaemic control and A 205
- type 1 diabetes 224
- Nateglinide A 214, A 215
- Natriuretic peptide - atrial - microalbuminuria, effect on in type 2 diabetes A 266
- - polymorphism - diabetic nephropathy and A 261
- cardiac expression A 306

## Nephrin

Nephrin – experimental diabetic nephropathy, role in 1957r

– expression – diabetic hypertensive rat 874

– irbesartan, effect of 874

– islet B-cell 1274

– polymorphism – diabetic nephropathy and A 77

Nephropathy – diabetic A 34, A 35

– advanced glycation end-products, role of 129r

– clinical aspects A 269–A 276

– diabetic pregnancy A 246

– epidemiology S 3, S 37, S 78

– secular trend A 49, A 50

– European Study Group *EASD News Section 1/01 3, EASD News Section 9/01 36*

– experimental – ALT-946, protection by 108

– pathophysiology 1957r

– genetics [see also Genetics – diabetic nephropathy] A 76, A 77

– haptoglobin polymorphism and 602, 2104c, 2237c

– hypertension, effect of – rat model 2088

– low birth-weight, effect of in rat 729

– markers A 266–A 269

– paraoxonase polymorphisms 104

– pathology A 76, A 77, A 263–A 266

– podocyte morphology – renoprotective agents, effect of 878

– postural hypotension – catecholamine response A 292

– proteoglycan synthesis in 488

– risk factors 224, A 267, S 37

– TGF- $\beta$  receptor expression – ACE inhibitor on 495

Nerve – advanced glycation end-products in A 318

– blood flow 1973r

– Ca<sup>2+</sup> flux – streptozotocin-diabetic rodents 1302

– growth factor (see Growth – factor – nerve/)

– morphometry – diabetic BB/Wor rat 889

Neuroblastoma cell – C-peptide, effect on A 297

Neurogenin 3 polymorphism and diabetes 123, 241

Neuropathy – autonomic diabetic A 291–A 293

– gastric emptying 1080r

– hypertension and A 272

– peripheral – diabetic foot ulceration and A 278

– diabetic A 13, A 14

– ankle mobility A 3

– chelation therapy, effect of in streptozotocin-diabetic rat 621

– clinical scoring system A 299

– EASD Study Group (Neurodiab) *EASD News Section 4/01 19*

– experimental A 296, A 297

– C-peptide, effect of 889

– foot blood flow, effect on A 278

– gait, effect on 585

– oxidative stress, role of – rat 424

– oxygen free radical scavenger, effect of – rat 1161

– painful – glycaemic excursions A 299

– pancreas transplantation, improvement following A 73

– pathogenesis 1973r

– risk factors A 298

Neuropeptide – pro-oxidant-treated diabetic rat nerve 424

– Y – islet B-cell function, effect on A 148

Neurotrophic factor – insulin signalling, effect on 555

NF- $\kappa$ B [see Transcription – factor/ Nicorandil – sulphonylurea interaction A 68]

Nicotinamide – brain, effect on in streptozotocin-diabetic rat A 296

– islet B-cell maturation, effect on A 71

Nicotine – infusion – insulin resistance induced A 191

Nitric oxide – diabetic neuropathy and 1973r

– macrovascular disease and A 308

– platelet, production by – homocysteine, effect of 979

– synthase – constitutive – retinal capillary permeability and 1043

– endothelial – polymorphism – cardiovascular risk in diabetes and A 313

– polymorphism – diabetic nephropathy and A 76

– inhibitor A 145

– islet B-cell A 129, A 136, A 144, A 145, A 148

– polymorphism – type 2 diabetes and A 22

Nitrotyrosine – plasma – diabetes 834

NNC77-0074 [see Imidazoline/ Nobel Prizes and Diabetes *EASD News Section 9/01 37*

## O

Obesity – abdominal A 86, A 87, A 181, A 182

– epidemiology A 110, A 112

– insulin resistance and A 205

– insulin secretion in A 138

– melanocortin-4 mutation and 1335

– PAI-1 expression 1121, 2025

– pioglitazone, ff A 220

– prediction of type 2 diabetes using A 116, A 117

– adipocyte lipid binding protein, regional variation of 1268

– childhood A 189, A 257

– diabetes type 1 40

– diabetes risk factor 1221

– diabetic nephropathy and 104

– epidemiology A 110

– genetics A 181

– gestational diabetes and – leptin 164

– GIP, role of A 18

– insulin secretion in 1988

– leptin and A 167

– low birth-weight, following A 244

– metabolic effects of weight reduction A 189, A 190

– metabolism in A 180–A 183

– phospholipid transfer protein activity, effect on 1111

– public health and 1r

– treatment A 180, A 182

– GLP-1 analogues A 196, A 198

– orlistat – type 2 diabetes, in A 231, A 232

– uncoupling proteins and 946r

Ocular [see Eye/]

Oestrogen [see also Contraception/]

– dyslipidaemia and – type 2 diabetes A 301

– glucose metabolic effects A 160

– replacement – continuous combined A 47

Orlistat [see Obesity – treatment/]

Ornithine  $\alpha$ -ketoglutarate – insulin secretion, effect on A 139

Osteoporosis – diabetic foot A 277

Overfeeding – metabolic effects – IGF2 and IGFBP1 polymorphisms 2231

Oxidase – amine – semicarbazide-sensitive – plasma – insulin, effect of 388c

Oxidative stress – cardiac diabetic autonomic neuropathy and A 292

– complications of diabetes, in 674r, A 155, A 156

– diabetic embryopathy and 766

– diabetic macrovascular disease and A 320

– diabetic neuropathy and 1973r, A 13, A 14

– embryopathy and A 12

– endothelial cell – advanced glycation end-products 1310

– insulin endocytosis 605

– endothelial function and – impaired glucose tolerance 706

– experimental – streptozotocin-diabetic rat – neuropathy 424

– impaired glucose tolerance, in 706

– islet B-cell – resistant cell line selection A 146

– marker – 8-epi-PGF2 $\alpha$  706

– macromolecular protein complex 1356c

– nitrotyrosine, plasma 834

– proinsulin:insulin ratio and 788c

– retina, effect on – VEGF expression 1102

– transition metals, role of 621

– troglitazone, effect of 2004

– vascular smooth muscle cell A 21

- Oxygen free radicals – islet B-cell cytotoxicity, role in A 144
- scavenger – antihypertensive therapy, effect of A 275
  - dimethylthiourea – diabetic neuropathy protection 1161
  - islet B-cell, in A 146
- P**
- Pancreas – dorsal – agenesis A 161
- duct – cell – PDX-1 expression 1203 r
  - islet interactions 575
  - regeneration – insulin signalling 2056
  - embryology 1071 r
  - human – NOD mouse transplantation 2066
  - PDX-1, role of 1203 r
  - glucose uptake – type 1 diabetes A 174
  - morphometry 575
  - transplantation [*see* Transplantation]
- Pancreatic duodenal homeobox-1 [*see* Transcription – factor – pancreatic duodenal homeobox-1/]
- Paracetamol – glucuronide – hepatic UDP-glucose flux measurement 729
- Paraoxonase polymorphisms – diabetic nephropathy and 104, 1062 c
- insulin sensitivity and A 92
- Paraoxonase-1 – promoter polymorphism – glucose tolerance and 1177
- Paul Langerhans Research Award *EASD News Section 10/01* 45
- PDX-1 [*see* Transcription – factor – pancreatic duodenal homeobox-1/]
- Pentoxifylline – ACE inhibitor combination therapy in microalbuminuria A 271
- Peroxisome proliferator-activated receptor [*see* PPAR/]
- PET [*see* Positron emission tomography/]
- Phogrin (IA-2 $\beta$ ) – genetics 81
- Phosphatase and tensin homologue [*see* PTEN/]
- Phosphodiesterase – 3B – insulin secretion, role in A 134
- inhibitor [*see also* Sildenafil/]
  - cilostazol – restenosis after angioplasty, effect on 1034
  - IC351 A 295
- Phosphoenolpyruvate carboxykinase – adipose tissue, expression by A 166
- Phosphofructokinase – 2 (6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase) A 19
- islet B-cell – 60% pancreatectomy, following 1026
- Phospholipase A<sub>2</sub>, secretory – insulin secretion, role in A 129, A 130
- Phospholipid transfer protein – obesity, effect of 1111
- PI3K [*see* Kinase – phosphatidylinositol – 3'/]
- Pig – specific pathogen-free – pig endogenous retrovirus 2044
- Pima Indians – type 2 diabetes – genetics 779
- Pituitary – adenylate cyclase activating polypeptide – insulin secretion, effect on A 131
- leptin receptor signalling A 63
- Placenta – glucose dynamics in gestational diabetes – *Erratum* 927
- glucose transport in gestational diabetes 1133
- Plasminogen – activator inhibitor 1 – expression – abdominal adipose tissue 1121, 2025
- proinsulin, effect of 1121
  - regulation 713
  - insulin resistance and A 309
  - kringle 5 – retinal angiogenesis, effect on 757
- Platelet – adhesion – coronary reperfusion injury, in 2165
- AGE receptors – dietary AGE, effect of A 33
  - aspirin resistance – insulin resistance association A 205
  - function – diabetes A 324, A 325
  - gestational A 240
  - nitric oxide production – homocysteine, effect of 979
  - protein kinase C – hyperglycaemia, effect of 188
- Polycystic ovary syndrome – insulin receptor substrate-1 polymorphism 1200 c
- insulin resistance and A 86, A 187, A 188
- Polymerase chain reaction – competitive – reverse transcription, following (RT-cPCR) 544
- single-strand conformation polymorphism 237
- Polyol pathway – complications of diabetes, role in 674 r
- nerve A 296
- Positron emission tomography – glucose uptake measurement, in 2171
- insulin receptor imaging in vivo A 206
  - islet B-cell imaging 393 r
  - myocardial blood flow oxidation in 184
- PPAR (Peroxisome proliferator-activated receptor)
- $\gamma$  – agonist [*see also* Thiazolidinedione/]
  - farglitazar – hypotensive effect A 272, A 274
  - coactivator-1 – polymorphism – type 2 diabetes 2220
  - inhibitor – adipocyte-selective – GW0072 A 201
  - p85 $\alpha$  expression, effect on 544
  - phosphatidylinositol 3'-kinase, effect on 544
  - polymorphism – insulin sensitivity and 1170, A 23
  - serum lipoproteins, effect on 1354 c
  - type 2 diabetes A 90, A 91
  - weight-gain and 925 c
- Prediabetes – type 1 – enterovirus antibodies in infancy 818
- type 2 – lipoproteins A 166
- Prediction – type 1 diabetes A 31, A 32, A 82, A 101
- cohort study 290
  - ICA seroconversion – enterovirus serology 818
  - ICA12
  - infant feeding and 63
  - insulin auto-antibodies A 256
  - interleukin-18 309
  - islet autoimmunity [*see also* Antibody/]
  - sex 40
  - type 2 diabetes A 115, A 116
- Pre-eclampsia in diabetes A 247
- Pregnancy – diabetes A 42, A 43, A 245
- experimental – fetal oxidative stress 766
  - neonate, effect on A 242
  - placenta – trophoblast proliferation 209
  - glucose tolerance – dietary fat and 972
  - insulin sensitivity in A 240
  - pre-eclampsia A 42
- Proinsulin – adipose tissue PAI-1 expression, effect on 1121
- insulin ratio – oxidative stress and 788 c
- Prolyl endopeptidase – polymorphism – diabetic nephropathy and A 268
- Pro-opiomelanocortin – polymorphism – leptin and A 168
- Protease inhibitor therapy – cardiovascular risk factors in A 314
- insulin resistance A 204
  - metabolic effects A 37, A 43, A 44
- Protein – carbonyl – experimental diabetic embryopathy, in 766
- Protein – multifunctional – 14kDa (MFP14) – NOD mouse islet protection 839
- Proteinuria – cardiovascular risk factor in diabetes S54
- diabetic retinopathy risk factor S22
- Proteoglycan – renal epithelial cell, synthesis by 488
- Psammomys obesus* – islet B-cell function A 147
- Psoriasis – Insulin – resistance A 187
- PTEN (phosphatase and tensin homologue) – polymorphism – type 2 diabetes 237
- Pterospermum semisagittatum* – hypoglycaemic action A 227
- Puberty – diabetic retinopathy progression and 2203
- Public health – type 2 diabetes prevention 1 r
- Pyridoxamine A 290

## Quality

## Q

Quality of life – diabetes and [*see also* Diabetes – care – psychological/ A 252, A 253, A 258, A 259]

## R

Ramadan, oral hypoglycaemic agents during A 60  
 Rat – BB – cytomegalovirus, immune response to A 151  
 – – diabetes – disease modifying therapy A 99, A 100  
 – – diabetes-resistant – Kilham rat virus, diabetes induction by 271 r  
 – – insulinitis – NK cells A 150  
 – – islet autoimmunity – immunotherapy 521 r  
 – BBxWOKW – diabetes A 53  
 – BB/S – diabetes – apoptosis and 320  
 – BB/Wor – neuropathy – C-peptide, effect of 889  
 – Goto-Kazikaki (GK) – diabetes – maternal transmission A 87  
 – – intrauterine environment, role of in diabetes A 55  
 – – neuropathy – small-fibre A 297  
 – LEW.1AR1/Ztm-iddm – type 1 diabetes model 1189  
 – Otsuka Long Evans Tokushima Fatty – islet B-cell regeneration A 148  
 – partial pancreatectomy – duct regeneration 2056  
 – – islet B-cell adaptation 1026  
 – Ren-2 transgenic – streptozotocin-diabetic – retinopathy A 40  
 – spontaneously hypertensive streptozotocin-diabetic – nephrin expression 874  
 – – renal fibronectin 2088  
 – – retinopathy 883  
 – streptozotocin-diabetic – cerebral metabolism 346  
 – – islet clusterin expression 2192  
 – – neuropathy – dimethylthiourea, effect of 1161  
 – – – oxidative stress, role of 424  
 – – renal adaptation 721  
 – – renal lysosomal function rat 230  
 – – renoprotection 495  
 – – – podocyte morphology 878  
 – – retinal capillary permeability 1043  
 – – retinal changes 791 r  
 – – retinal VEGF expression 1102  
 – – skeletal muscle – acetylcholinesterase 220  
 – – – glycogen phosphorylase localisation 1238  
 – – spinal cord neuron –  $\text{Ca}^{2+}$  flux 1302  
 – streptozotocin-nicotinamide-diabetic A 148  
 – WOKW – insulin resistance syndrome A 53

Renal – aquaporin-2 expression – streptozotocin-diabetic rat 637  
 – biopsy – type 1 diabetes in adolescence, in 865  
 – cytokine antagonist expression – type 1 diabetes A 316  
 – epithelial cell – cultured – MDCK 488  
 – –  $\text{N}^{\epsilon}$ -(carboxymethyl)lysine, effect of 488  
 – – proteoglycan synthesis 488  
 – failure – end-stage in diabetes S 46  
 – – insulin pharmacokinetics A 15  
 – fibronectin – streptozotocin-diabetic spontaneously hypertensive rat 2088  
 – glomerular – low birth-weight, effect of in rat 721  
 – glucose release in hypoglycaemia A 67  
 – haemodynamics – Doppler ultrasound A 267, A 268  
 – hypertrophy – diabetes A 34  
 – lysosomal processing in streptozotocin-diabetic rat 230  
 – mortality – diabetes S 14  
 –  $\text{Na}^{+}/\text{K}^{+}$  ATPase – C-peptide, effect of A 156  
 – plasma flow – glucose & insulin, effect of 95  
 – transplantation – diabetes effect on long-term outcome A 35  
 – tubular function – microalbuminuria prediction and 224  
 – urea transporter A 1 expression – streptozotocin-diabetic rat 637  
 Renoprotection [*see also* Angiotensin – converting enzyme – inhibitor; Microalbuminuria; Nephropathy/ ACE inhibitor 878  
 – – ramipril 230  
 – – TGF- $\beta$  receptor expression 495  
 Renoprotection – ALT-946 108  
 – angiotensin-II receptor antagonist 874, 878  
 Repaglinide – islet B-cell specificity 747  
 –  $\text{K}^{+}$  ATP channel, effect on – tissue specificity 747  
 – metformin combination therapy A 235  
 – postprandial hypertriglyceridaemia, effect on in diabetes A 301  
 – renal impairment, use in A 36  
 Resiniferatoxin – insulin resistance, effect on A 178  
 Resistin A 63  
 Retina [*see also* Eye; Retinopathy/ angiogenesis – intravitreal plasminogen kringle 5, effect of 757  
 – blood flow [*see also* Eye/ capillary permeability – constitutive nitric oxide synthase and 1043  
 – glial cell – diabetes, effect of 791 r  
 – neural cell – diabetes, effect of 791 r  
 – oscillatory potential – streptozotocin-diabetic spontaneously hypertensive rat 883  
 – pericyte – diabetes, effect of 791 r

– vascular endothelial growth factor – oxidative stress, effect of in diabetic rat 1102  
 Retinoic acid – islet B-cell, effect on – glucokinase expression A 121  
 Retinoid X receptor – agonist – LG100268 – skeletal muscle, effect on 444  
 Retinol, urinary in type 1 diabetes 224  
 Retinopathy – diabetic – advanced glycation end-products, role of 129 r  
 – – blindness 147  
 – – candesartan, effect of in rat 883  
 – – clinical aspects A 285–A 287  
 – – corneal epithelial basement membrane in 340  
 – – epidemiology A 49, A 50, A 285, A 286, S 22, S 3, S 78  
 – – pancreas transplantation, improvement following A 73  
 – – pathogenesis 791 r, A 39, A 40, A 288–A 290  
 – – patient understanding A 251  
 – – progression S 22  
 – – – decreasing incidence A 49  
 – – – glycaemic control and 1215  
 – – – risk factors 2203  
 – – risk factors 156, A 285, A 286, S 22, S 31  
 – – screening A 50, A 287,  
 – – type 2 diabetes 156  
 – experimental – hyperoxic neonatal rat – angiogenesis inhibitor, effect of 757  
 Reverse transcription-competitive polymerase chain reaction (RT-cPCR) 544  
 RT-cPCR [*see* Reverse transcription/ RXR [*see* Retinoid X receptor/

## S

Schizophrenia – diabetes and – glycaemic control A 60  
 Scintigraphy – exercise myocardial A 304  
 Screening – coeliac disease – type 1 diabetes families 1051  
 – coronary heart disease S 72  
 – diabetes A 7  
 – diabetic nephropathy A 263  
 – diabetic retinopathy A 50, A 287  
 – gestational diabetes A 43  
 – insulin resistance syndrome A 203  
 – MODY mutations – denaturing HPLC 775  
 Sepsis – diabetic decompensation, in 1011  
 Sex – diabetes risk and 3 r  
 – diabetes risk and 40  
 – diabetic nephropathy, effect on A 270  
 – diagnostic criteria for diabetes and A 108  
 – hormone [*see also* Androgen/ A 223  
 – – binding globulin – diabetes A 223  
 – – diabetes, in A 170



- hyperandrogenism /see also Polycystic ovarian syndrome/
  - Signalling - cell /see B-cell, islet; Insulin - receptor; Insulin - secretion; Kinase/
  - Sildenafil 1296, A 294
  - Sleep - apnoea - insulin sensitivity, effect on A 186
  - blood glucose, effect of in type 1 diabetes A 66
  - Smoking /see also Nicotine/ 1221
  - diabetic neuropathy and A 298
  - diabetic retinopathy, effect on 156
  - end-stage renal failure and S 46
  - immunological effects A 152
  - insulin se absorption, effect on A 25
  - transforming growth factor- $\beta$  levels and A 310
  - tumour necrosis factor- $\alpha$  receptors and A 317
  - Socio-economic state - diabetes A 259
  - Sodium transport - erythrocyte - hyperinsulinaemia, effect of A 188
  - $\text{Na}^+/\text{Ca}^{2+}$  exchange - islet B-cell cytotoxicity, role in A 143
  - $\text{Na}^+/\text{K}^+$  ATPase - C-peptide, effect of A 156
  - Somatostatin - cell - pancreatic duct lumen 575
  - Stem cell - insulin-secreting cell, differentiation to 407r
  - therapy 407r
  - Steroid /see also Glucocorticoid; Oestrogen/ - plasma - thiazolidinedione, effect of A 202
  - Sterol - regulatory element binding protein - insulin-secreting cell expression of A 31
  - Stevia rebaudiana* - hypoglycaemic effect A 236
  - Streptozotocin - islet B-cell, effect on - human A 144
  - Stress - glycaemic control, effect on 268c
  - rat pregnancy, in - glucose metabolic effects in offspring A 243
  - Stroke - diabetes A 57
  - lacunar - diabetes and A 306
  - risk factors in diabetes S 54
  - Succinic acid ester - islet B-cell tracer 393r
  - Succinyl CoA synthetase - ATP- and GTP-specific isoforms in islet B-cell 89
  - Sulphatide - islet B-cell A 137
  - Sulphonylurea - glibenclamide A 216
  - gliclazide - islet B-cell specificity 1019
  - retinal leucostasis, effect on A 288
  - tissue specificity A 68
  - glimepiride A 216
  - hypoglycaemia unawareness, beneficial effect on A 67
  - islet B-cell, effect on - long-term A 136
  - mortality in diabetes, effect on A 112
  - myocardial ischaemia, effect on A 69
  - nicorandil interaction A 68
  - receptor - 1 - promoter polymorphism - glucose tolerance and 1330
  - intracellular A 134
  - subtypes - gliclazide, effect of 1019
  - repaglinide, effect of 747
  - sulphonylurea/nicorandil interactions and A 68
  - Superoxide dismutase /see Antioxidant - enzyme/
  - Synaptosomal associated protein (SNAP25) A 133
  - Syntaxin - insulin exocytosis, role in A 62
  - polymorphism - type 2 diabetes 2092
- T**
- Taste cell - signalling A 51
  - Taurine /see Antioxidant - taurine/
  - T-cell /see Lymphocyte/
  - Telemedicine A 59
  - Tetrahydrobiopterin - insulin secretion, role in A 136
  - TGF /see Growth - factor - transforming/
  - Thalassaemia  $\alpha$  trait - gestational diabetes and 966
  - Theophylline - therapy - hypoglycaemia awareness and A 219
  - Thiazolidinedione A 199-A 202
  - action A 27, A 28
  - insulin combination therapy A 233, A 235
  - lipids, effect on A 199, A 200, A 201
  - metformin combination therapy A 233, A 235
  - pioglitazone A 199, A 200, A 220, A 221
  - oral insulin combination therapy A 213
  - rosiglitazone A 199, A 202, A 221, A 222, A 36, A 37
  - adipocyte, effect on - p85 $\alpha$  expression 544
  - metabolic effects in type 2 diabetes 2210
  - myocardial blood flow, effect on A 57
  - RXR agonist, synergism with 444
  - sulphonylurea combination therapy A 233, A 235
  - therapy A 220-A 222
  - albumin excretion rate, effect on A 271
  - triple combination therapy A 233, A 235
  - troglitazone A 199
  - adipocyte, effect on 55
  - glyoxalase system, inhibition of 2004
  - hepatotoxicity 2004
  - skeletal muscle, effect on 444
  - Thrombomodulin, plasma - erectile dysfunction, in 1155
  - physical training, effect of in diabetes 693
  - Thymocyte proliferation - NOD mouse diabetes, in 1054
  - Thyroid - autoimmunity - type 1 diabetes, in A 81, A 152, A 153
  - hyperthyroidism - glucose metabolism A 186
  - Transcription - factor - activator protein-1 - PAI-1 expression, role in 713
  - basic helix-loop-helix 123, 241
  - inhibitor - Id proteins 453
  - polymorphisms - type 2 diabetes and A 89
  - caudal-related homeodomain-1 A 172
  - expression - islet B-cell differentiation, during A 119
  - insulin promoter factor 1 \*IPF-1) 1203r
  - islet B-cell, role in 1071r, A 41
  - neurogenin 3 123, 241
  - NF- $\kappa$ B A 41
  - nuclear factor 1 2156
  - pancreatic duodenal homeobox-1 (PDX-1) - islet B-cell regulator 1203r, A 51, A 52
  - repressor A 120
  - Transplantation - bone marrow - diabetes following A 110
  - islet /see also Islet of Langerhans/ A 72, A 260
  - autoimmune reactivation following 521r
  - early apoptosis A 144
  - human - multicentre network 859, 2237c
  - microencapsulated 646, A 121
  - partial islet B-cell function following 1349r
  - stem-cell-derived 407r
  - xenograft - retrovirus transmission risk 2044
  - pancreas A 72, A 73
  - human embryonic 2066
  - selection criteria A 260
  - renal - long-term outcome in diabetes A 35
  - Tri-iodothyronine - BB rat diabetes incidence, effect on A 99
  - Trimetazidine - glucose metabolism, effect on A 69
  - Trophoblast cell, choriocarcinoma - glucose, effect of 209
  - Tumour necrosis factor  $\alpha$  - adipocyte expression 377
  - adipocyte lipolysis, effect on 55
  - adipose tissue, secretion by 654c
  - insulin resistance, role in A 175-A 177
  - islet B-cell cytotoxicity 2115r
  - plasma - exercise, effect of A 254
  - polymorphism - coronary heart disease in diabetes and A 311
  - type 2 diabetes and A 92
  - receptor - plasma - smoking and A 317
  - vascular effects in diabetes A 317

## Tungstate

- Tungstate – insulin-like effects in streptozotocin-diabetic rat 507
- islet growth, effect on A 70
- obesity, effect on A 182
- Twin study – type 1 diabetes – age at onset 354
- – *Erratum* 927
- insulin resistance syndrome heritability 537
- low birth-weight 33
- Tyrosine – phosphatase – IA-2 – epitope presentation by HLA DQ8 A 9
- – expression A 30
- – genetics 81
- – phylogenetics 81
- – subfraction autoimmunity – diabetes A 103
- – 1B – inhibitor – insulin sensitivity, effect on A 78
- kinase – BTK – transgenic mouse A 117

## U

- UKPDS (UK Prospective Diabetes Study) – diabetic retinopathy risk factors 156
- economics of diabetes care – metformin and 298
- Ultrasound – Doppler – renal A 267, A 268
- Uncoupling protein 946r
- polymorphism – diabetic nephropathy and A 261
- – obesity A 181
- – type 2 diabetes 373, 1065c
- Urea transporter A 1 – streptozotocin-diabetic rat, expression in 637
- Uric acid – abdominal obesity and A 181
- Urinary tract infection – diabetes, in A 271

## V

- Vanadate – BB rat diabetes incidence, effect on A 99
- hepatic glucose-6-phosphatase, effect on A 172
- *Psammomys obesus* diabetes, protection against A 179
- Vascular – disease [*see also* Macrovascular disease; Microangiopathy]
  - – diabetes – American Indians S 78
  - – China S 82
  - – epidemiology S 78, S 82
  - – WHO Multinational Study S 1–S 87
  - – younger patients S 78
  - – pathogenesis 674r
  - – peripheral – diabetes – epidemiology A 280
  - – revascularisation procedures A 282
  - – risk factors in type 2 diabetes A 315
  - reactivity A 323–A 325
  - – diabetes – blood volume redistribution, effect on 429
  - – type 1 S 93
  - – glucosamine, effect of 196
  - – glucose, effect of 95
  - – insulin, effect of 95, A 49
  - – protein kinase C and 659r
  - smooth muscle [*see* Muscle – smooth – vascular]
- Virus – cytomegalo – BB rat diabetes induction A 10
- encephalomyocarditis – diabetogenicity 271r
- entero – Coxsackie B5 – islet, effect on A 103
- – epidemiology – type 1 diabetes and A 103
- – prediabetes type 1 818
- – type 1 diabetes risk and A 32

- human immunodeficiency – infection – insulin resistance A 6
- – protease inhibitor therapy A 36
- Kilham rat – diabetogenicity 271r
- retro – pig endogenous – pig islet cell xenograft 2044, A 72
- type 1 diabetes, role in 271r
- Visual impairment [*see also* Blindness] – diabetes, in – epidemiology S 31
- Vitamin – A – thiazolidinedione therapy, effect on A 202
- C [*see* Ascorbic acid]
- D – insulin receptor expression, effect on A 160
- – islet B-cell, effect on – glucokinase expression A 121
- – receptor polymorphism – type 1 diabetes and A 53
- – type 2 diabetes A 94
- – type 1 diabetes and A 98, A 100
- E – deficiency – streptozotocin-diabetic rat – neuropathy 424

## W

- WHO (World Health Organisation)
  - Multinational Study of Vascular Disease in Diabetes – follow-up S 1–S 87
- Wolcott-Rallison syndrome 786c, A 82
- Wolfram – gene – polymorphism – type 2 diabetes A 95
- Wound healing [*see* Healing]

## X

- Xenin 8 A 193
- Xenopus* oocyte – K<sup>+</sup> ATP channel 747

## Z

- Zebrafish – IA-2 gene homologues 81

